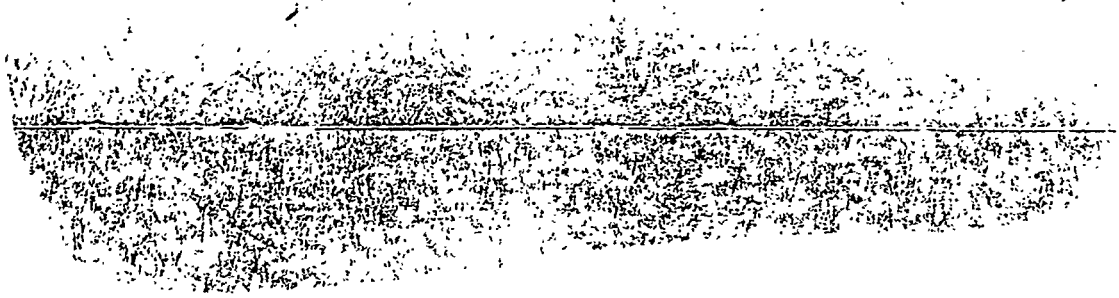
1652

Sanitized Version of Folder Labeled

MISCELLANEOUS - AIR ANALYSES 1944 – 1962



Carbide and Carbon Chemicals Corporation Operating Contractor for the U.S. Atomic Energy Commission.

Monthly Report - April

MEMO

AVOID ORAL INSTRUCTIONS

Date 4/4 1962

To

1:00 pm - Clause requested assistance in checking extensive mercury spill in the street at Ave. E and 6th St. and Ave. F and 6th St. Showed Forester the approximate boundary of the spill as indicated by the GE Detector and suggested that this area be wet with 0.5% to 1.0% sodium hypochlorite solution.

Signed

-486
5 3-59)

INDUSTRIAL HYGIENE FIELD SAMPLING REPORT

DATE OF SERVICE TRIP 4-6-62 BUILDING _____ ROUTINE ☐ SPECIAL ☑ APR REPORT NO. 22

REQUESTED BY _____

SAMPLE NUMBER	SAMPLING LOCATION	SAMPLING TIME	SAMPLING RATE	SAMPLING VOLUME	CONTAMINANT	TOTAL µg.	CONCENTRATION	OBSERVATIONS
	Street area - north West corner of K1015							
1	Gutter area	1425			Hg	4	0.04	
2	Head level in this area	1428			Hg	0	0.00	
3	Curb at southeast corner of Avenue E + 6th	1431			Hg	58	1.07	
4	Street area 5 ft from southeast corner of Ave E + 6th	1423			Hg	0	0.08	
5	Grass 2 ft from edge of curb in this area	1436			Hg	30	0.40	
6	Area - 1 ft in radius from drain				Hg	60	1.20	
	Note: Samples other than head level were taken approx 3" above surface.							

SAMPLED BY B.L.T. SUPERVISOR T. Kwasowski DATE RELEASED 4/11/62

CX-2338 (2-59)

INDUSTRIAL HYGIENE FIELD SAMPLING REPORT

DATE OF SERVICE TRIP 4-6-62 BUILDING _____ ROUTINE ☐ SPECIAL ☑ APR 11 1962 REPORT NO. 277

REQUESTED BY _____

SAMPLE NUMBER	SAMPLING LOCATION	SAMPLING TIME	SAMPLING RATE	SAMPLING VOLUME	CONTAMINANT	TOTAL mg Lead	CONCENTRATION	OBSERVATIONS
	Northeast Corner of Arsenal F + 6th							
1	Bottom of drain	1400			Hg	4	0.04	
2	Curb-by drain	1403			Hg	10	0.10	
3	Head level in area	1406			Hg	0	0.00	
4	Street area within 5 ft of drain	1409			Hg	6	0.06	
5	Metal grill on drain	1412			Hg	10	0.10	
6	Grass along edge of Curb	1415			Hg	4	0.04	
7	Gutter - north side of 6th street - 35 ft from West end	1418			Hg	0	0.00	
8	Gutter - south side of 6th street - 50 ft from west end	1420			Hg	0	0.00	

SAMPLED BY B.L.T. SUPERVISOR T. Kwasnoski DATE RELEASED 4/11/62

COPY TO: File

INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 174
Routine
Special X
Requested by D. L. Stoddard
Date 4-20-60

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
	4-6-60	A sample of the coating used on converter pipe was ignited and the fumes collected in water.				Coating sample was scraped from a converter pipe.
		Fumes		Chloride	Positive	
				Fluoride	Positive	
		Masking compound "Vinco" 16205-X D-6-169 Coating Materials Laboratory 51 E. Center St. Nutley, N. J.				

WCX-2512 (9-55) K-25 RC Medical Department

ISSUED BY: D. L. S.

MEMO AVOID ORAL INSTRUCTIONS Date 12/3 1959

To ozone production

Tests of the Ozonitron Model F-20 manufactured by the Ozonitron Corporation, 15 States St, New Haven Conn. have proved this to be a non hazardous ozone device when used in accordance with the following suggestions listed below.

Although concentrations as high as 0.3 ppm O_3 at the discharge port of the device later tests indicated that this could vary down to as low as 0.06 ppm O_3.

One unit operation of the the device in a room of 450 cubic feet which contain very little ozone susceptible surfaces and in a similar room of approx 1000 cubic feet

Signed

(Over)

UON-486
(3-59)

- containing quite a bit of rubber covered equipment - failed to show any tendency for the ozone generated by the ~~Sanitaire~~ device to build-up.

Consumption tests run indicated that the ozone decomposed by a factor of 10 at a distance of 10' feet from the discharge port. Some doubt as to the reliability of these last two results exist so Lybains will obtain 3 new bulbs #02 HW (GE) to replace those now in the device and request that the consumption tests be done again

1/19/60

Called Mr. Horn - Told sullivan the device was ready for a final round of O_3 determinations

Relief through new PURITRON®

electronic unit hailed by doctors

after they buy it and see it work in their own homes, for their own families, for their patients in their offices and operating rooms.

Only a sinus, asthma or allergy sufferer knows the terror of a night spent fighting for breath . . . a night spent praying for a moment of relief when you can breathe without fear of coughing, sneezing, wheezing.

Doctors know how anixiously sufferers are waiting for news of any advance in the field of allergic relief.

That's why they test, test and retest before recommending any new medication or unit.

Every hay fever, asthma and sinus sufferer should now know these facts:

A remarkable "Puritron" has been developed by electronic scientists and is being acclaimed by doctors.

A famed New England allergist installed three Puritrons in his offices.

A New York physician has discovered that a Puritron in his operating room helps lessen the amount of nasal mucous present.

Why Puritron is helping so many allergy sufferers to breathe easily . . . sleep comfortably without fear of sneezing, coughing or wheezing

Built into every Puritron are a unique filter and wonder working electronic tubes.

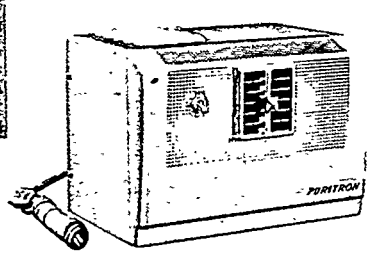
Pollen and dust are pulled out of the air and trapped in the filter. The air then passes before the electronic tube. Its sanitizing power reduces the threat of invisible particles that often trigger allergic reactions.

Doctors and sufferers report . . . breathing is easier. Sleep is sweet . . . comfortable.

JUST PLUG IN PORTABLE PURITRON®

and clear the air of irritating dust, odor, smoke. 110 volts AC . . . can be used in any room. Better than a kitchen exhaust fan. Needs no expensive installation.

U.S. Pat. No. 2855641
No. 2359057
And Other Pat. Pend.



Model F-20 illustrated $39.95 (for 15' x 15' room)
Large Size, Model 800 $69.95 (for 25' x 25' room)

In the doctors' own words:

"I have been recommending your Puritron machine . . . My patients have purchased the machine and have found it to work excellently."
—A New England Doctor

"Surpasses all expectations. Performs miracles for a dust allergy patient." **—A Pennsylvania Physician**

"Within a period of one week of testing the Puritron controlled a stubborn form of respiratory allergy in my daughter, age 5."
—A Southern Physician

(and from a grateful New York husband . . . not a doctor)

"I bought a Puritron for my wife who has been suffering from asthma for many years. I must say that the result is astonishing, she has had no attacks, breathes freely and the best of it, she gets a full night's rest."

(The above quotations are from doctors' unsolicited comments in letters now in our files.)

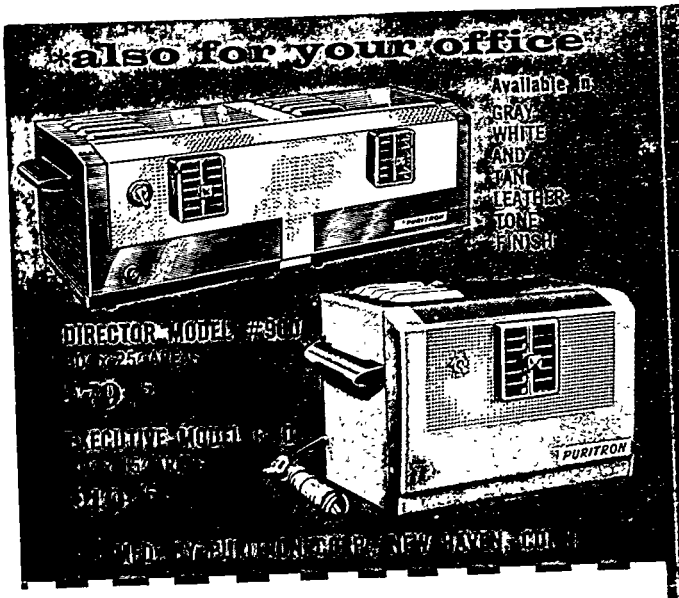
More Puritron units are being ordered practically every day by hospitals and physicians

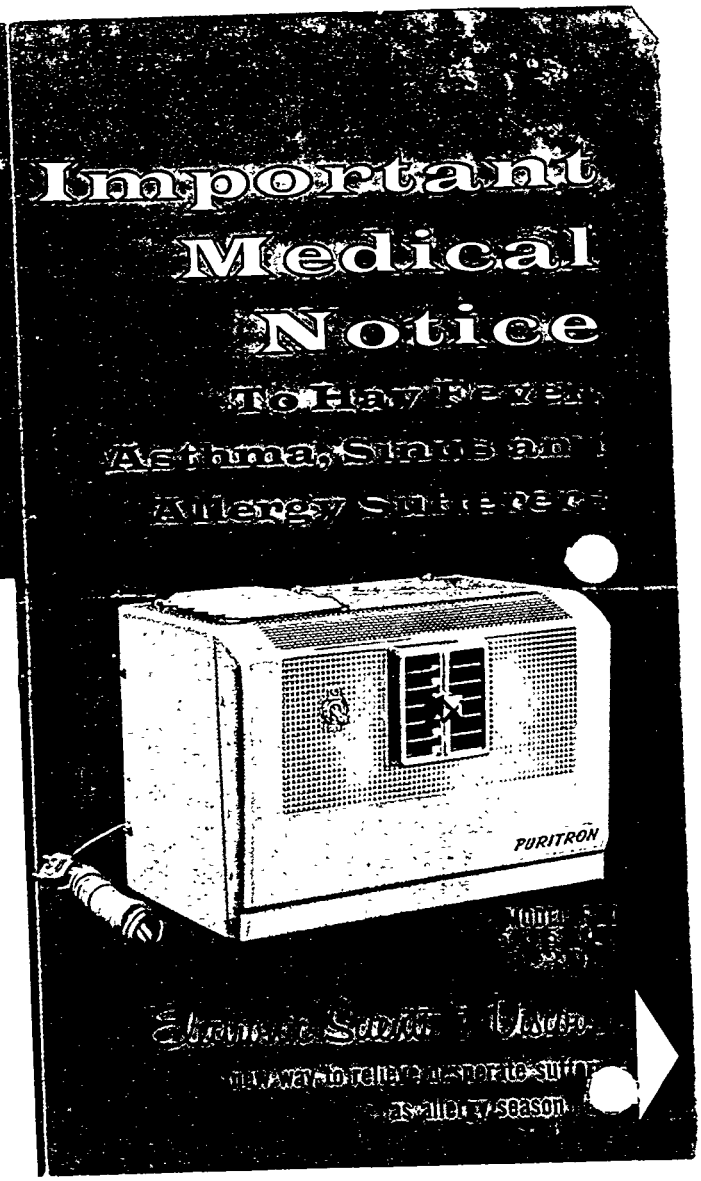
PURITRON®

better than a kitchen exhaust fan

Puritron gets rid of permeating cooking odors, stale tobacco smoke . . . allergy irritating dust. Portable . . . you move it from room to room. Plug it in and it goes to work instantly, clearing the air of pollen, odors and "inhales" the grease particles that normally settle on walls to cause spots and streaks. No window, no expensive installation needed.

see models on back page plus order blank





NAME_____

STREET_____

CITY_____ ZONE____ STATE_____

☐ Charge to my account #

☐ Check enclosed ☐ Send C.O.D.

QUAN.	COLOR	MODEL NUMBER	UNIT PRICE	TOTAL
	☐ Grey ☐ White ☐ Blue ☐ Pink	F-20		
	☐ Grey ☐ White	800		
	☐ Grey ☐ Leathertone ☐ White	F-40		
	☐ Grey ☐ Leathertone ☐ White	900		

MP-100

Guarantee

PURITRON is guaranteed for one year against all defects in parts and labor, with the exception of the tubes and filters. (Replaceable upon request, for a small charge.)

Better Than A Kitchen Exhaust Fan

Because PURITRON is so inexpensive . . . because no grease is allowed to accumulate . . . because it is portable, you will find kitchen odors, smoke and dust are eliminated when you want, where you want.

PURITRON

IS GUARANTEED TO SATISFY

PURITRON CORP. • 15 STILES ST. • NEW HAVEN

Pat. #2,855,641 - Pat. #2,359,057
Patents Pending

"

Facts about PURITRON

"

How Does PURITRON Operate?

PURITRON'S operational success is based on a new principle of air purification.
Air is pulled into PURITRON through the top of the machine, over a series of ultraviolet tubes, and through an impregnated filter, and then back into the room. Odors, smoke, and many dusts are removed.

What Does It Cost to Operate PURITRON?

PURITRON operates on a simple 110 volt, 60 cycle alternating current. This is the type of current found in 99% of the homes in the United States.
It costs approximately one cent for three hours of continuous operation. Since its current usage is so low, it will operate satisfactorily in older houses with even the most modest of wiring facilities and can be plugged into any outlet with no danger of overloading any facilities.

How Do You Install PURITRON?

PURITRON weighs only 12 lbs. and because of its low current consumption may be plugged in anywhere and carried from room to room wherever needed. There is absolutely no extra wiring or installation necessary. You do not need a window.

How Safe Is PURITRON?

PURITRON bears the Underwriters' label and has been found thoroughly safe from an electrical standpoint. It has been tested by E.T.L. for environmental safety and has been proven safe for use anywhere.

How Much Maintenance Does PURITRON Require?

PURITRON requires little maintenance. The filters should be cleaned from time to time. They are easily accessible and require no special tools for changing.

NOV 5 1959

INDUSTRIAL HYGIENE FIELD SAMPLING REPORT

DATE OF SERVICE TRIP 11/2/59 BUILDING K-1005 ROUTINE ☐ REPORT NO. 930

SPECIAL ☑ REQUESTED BY

SAMPLE NUMBER	SAMPLING LOCATION	SAMPLING			CONTAMINANT	TOTAL mg.	CONCENTRATION	OBSERVATIONS
		TIME	RATE	VOLUME				
1	Room 42	0802 1002	1 L/m	120 L	O_3		.006	
2	Same.	0802 1202	1 L/m	240 L	O_3		.004	
								Puritron turned on 10-30-59 at 1510. Door closed samples controlled from outside closed door.
	Exhaust port of puritron unit.		1 l/m.	120 l	O_3		0.3	
	Same		1 l/m.	240 l	O_3		0.3	
	Exhaust port of Puritron unit		23 cfm air flow					

PLOTTED BY J.K.L. + G.D.N. SUPERVISOR T. Kawasaki DATE RELEASED 11/4/59

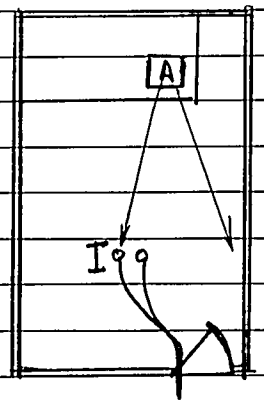
(1-59)

NOV 10 1959

INDUSTRIAL HYGIENE FIELD SAMPLING REPORT

DATE OF SERVICE TRIP 11/4/59 BUILDING K-1003 ROUTINE ☐ SPECIAL ☑ REPORT NO. 935 REQUESTED BY D.L. Strickland

SAMPLE NUMBER	SAMPLING LOCATION	SAMPLING			CONTAMINANT	TOTAL mg.	CONCENTRATION	OBSERVATIONS
		TIME	RATE	VOLUME				
1	Room 7.	0802 1002	1 l/m	120 l	O_3			
2	Same.	0802 1202	1 l/m	240 l	O_3			
								Puritron turned on 11/3/59 at 1400. Door closed.
	Sampling conditions: Volume of Room - approx. 850 cu ft. Puritron unit was on desk 38" from floor. Vanes of discharge Portsbere deflected downward. Sampling flasks were 61" to the left of the Puritron Unit and 57" from floor. (See sketch) All Vents of Room were sealed off. Approximately 28' of rubber insulated wire in area.							
	A. PURITRON I. IMPINGERS							



SAMPLED BY J.K.L. + D.L.D.M. SUPERVISOR T. Kwapniski DATE RELEASED 11/10/59

WCX-2338 (2-59)

NOV 6 1959

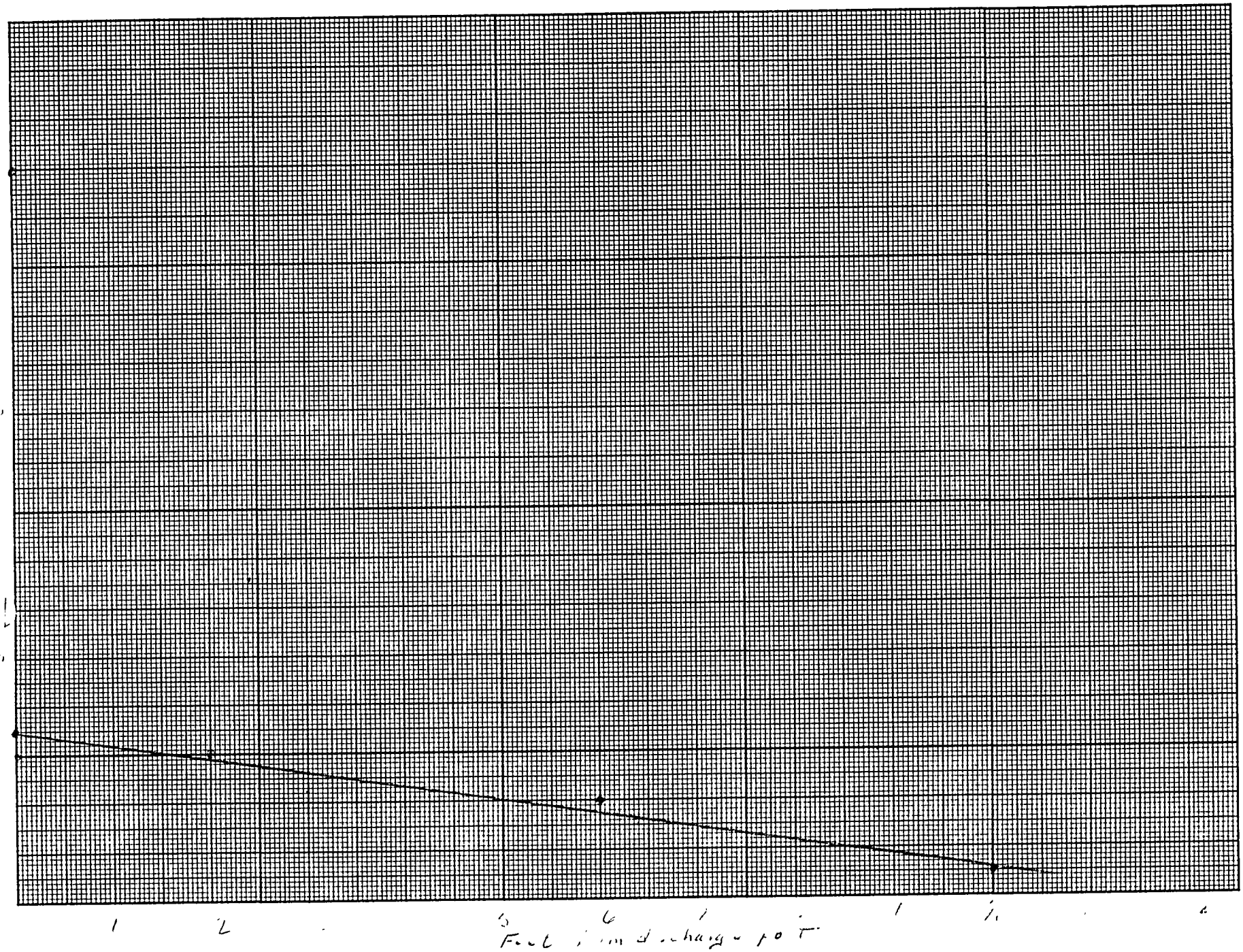
INDUSTRIAL HYGIENE FIELD SAMPLING REPORT

DATE OF SERVICE TRIP 11/25/59 BUILDING K-1004-D ROUTINE ☐ SPECIAL ☑ REPORT NO. _____ REQUESTED BY D. L. Stoddard

SAMPLE NUMBER	SAMPLING LOCATION	SAMPLING TIME	SAMPLING RATE	SAMPLING VOLUME	CONTAMINANT	TOTAL mg.	CONCENTRATION	OBSERVATIONS
1	10 Ft from exaust port of Puritron Unit inside plastic sheet tubing.				O_3			Plastic sheet tubing approx 6 inches in diameter was fastened to the exhaust port of the Puritron Unit and sampled at varying distances from the exhaust Port.
2	6 Ft from Exhaust port				O_3		0.04	
3	2 Ft from Exhaust port				O_3		0.06	
4	At exhaust port.				O_3		0.06	
5	At Exhaust port with filter removed				O_3		0.04	

SAMPLED BY JTM SUPERVISOR T Kurnoske DATE RELEASED 11/27/59

WCX-2338 (2-59)



INTER-COMPANY CORRESPONDENCE

(INSERT NAME) COMPANY CARBIDE AND CARBON CHEMICALS COMPANY LOCATION Post Office Box P OAK RIDGE, TENN.

TO Works Laboratory Department
LOCATION Room 011-D, K-25 Area

ATTENTION Mr. T. C. Whitson
COPY TO

DATE December 15, 1952

ANSWERING LETTER DATE

SUBJECT Bausch and Lomb Dust Counter Samples in Vault 9A

The average of 12 background samples taken in the vault before work began was approximately 0.1×10^6 particles per cubic foot. This average included six (6) samples taken with building fans operating and six (6) without the fans operating. The data showed the background to be approximately the same with or without the fans.

The Bausch and Lomb dust counter samples taken in vault 9A (12-11-52 (1000-1130)) during the work by the Maxon Company are described as follows:

1. This sample was taken six feet from the jack hammer on the downwind side; the jack hammer bit was operating in water; and the house ventilation was in operation - 0.1×10^6 particles/ft^3.

2. This sample was taken 4 feet from the saw on the downwind side - 0.1×10^6 particles/ft^3.

3. This sample was a duplicate of number 2 - 0.3×10^6 particles/ft^3.

4. This sample was taken 4 feet downwind from the jack hammer with the jack hammer being allowed to operate momentarily in the absence of water - 1.2×10^6 particles/ft^3.

5. This sample was a duplicate of number 4 - 2.1×10^6 particles/ft^3.

6. This sample was a duplicate of numbers 4 and 5 - 1.0×10^6 particles/ft^3.

7. This sample was a duplicate of numbers 4, 5, and 6 - 1.2×10^6 particles/ft^3.

8. This sample was taken beside the saw with the house fans off - 0.5×10^6 particles/ft^3.

9. This sample was taken 3 feet from the hammer with the drill operating in water - 0.1×10^6 particles/ft^3.

10. This sample was a duplicate of number 9 except the drill was momentarily dry - 1.0×10^6 particles/ft^3.

Yours truly,

J. C. Gallimore

JCG:fh

Works Laboratory Department
Industrial Hygiene Section

JAN 7 1953

Report Number 4205

Copy Number _____

Service Report

Date of Service Trip December, 1952

Location: Building _____ Room or Area _____

E. C. Bollinger; M. F. Schwenn

Samples Taken Air samples for freon [illegible]

Reason for Service Trip _____

Routine inspection

Sampling Positions and Analyses _____

During the period 12/2/52 through 12/6/52, ten freon analyses were made.

All results were < 75 ppm. No phosgene analyses were made.

Remarks _____

Supervisor T. Kwasnoski Date 1/6/53

Sampling Reference _____

Analysis Reference _____

WCX-427 K-25 RC Lab. Div. Central Files

WORKS LABORATORY DEPARTMENT

Special Analysis Section

OCT 1 - 1952

ANALYSIS REPORT

SAMPLE ~~Scioto River Water~~ SEQUENCE NO. ~~SA 2727~~

DATE REC'D ~~9/29/52~~ REQUEST NO. _____

RESULTS

~~Fluoride~~ ~~1.83 mg/liter~~

REMARKS _____

SUBMITTED BY ~~P. R. Kueh~~ LOCATION ~~K-1401~~

RESULTS APPROVED BY ORIGINAL SIGNED BY T. KWASNOSKI DATE ~~10/9/52~~

WCX-277(1-51) Laboratory Central Files K-25RC

Works Laboratory Department
Industrial Hygiene Section

SEP 17 1952

Report Number 4019

Copy Number _____

Service Report

Date of Service Trip August, 1952

Location: Building _____ Room or Area _____

E. C. Bollinger; M. F. Schwenn

Samples Taken Air samples for freon and phosgene

Reason for Service Trip _____

Routine inspection

Sampling Positions and Analyses _____

During the period 7/31/52 through 8/27/52, 56 Freon and 14 Phosgene analyses were made. At no time during the cutting of coolant lines did the Freon concentration exceed 75 ppm. No phosgene was detected.

Remarks _____

Supervisor T. Kwasnoski Date 9/9/52

Sampling Reference _____

Analysis Reference _____

WCX-427 K-25 RC Lab. Div. Central Files

Works Laboratory Department
Industrial Hygiene Section

JUL 1 1952

Report Number 3902

Copy Number _____

Service Report

Date of Service Trip 6/26/52 11:30 a.m.

Location: Building _____ Room or Area _____

H. F. Henry; M. F. Schwenn

Samples Taken Breath sample for Radon

Reason for Service Trip _____

Special investigation

Sampling Positions and Analyses _____

Breath sample, employee .192 x 10^{-12} curies/liter

Remarks _____

Supervisor T. Kwasnoski Date 6/30/52

Sampling Reference _____

Analysis Reference _____

WCX-427 K-25 RC Lab. Div. Central Files

Works Laboratory Department
Industrial Hygiene Section

Report Number HA - 3269

Copy Number 1

Service Report

Date of Service Trip 4-6-51 9:45 a.m.

Location: Building Maxon Construction Company Room or Area Storage yard

G. S. Storer

Samples Taken Air analyses for explosivity and trichloroethylene

Reason for Service Trip Special investigation.

Sampling Positions and Analyses The analyses were made inside storage tank #78-1008.

Explosivity: No explosion hazard

Trichloroethylene: Less than 75 PPM TCE

Remarks No operations were in progress.

Supervisor T. Kwasnoski Date 4-17-51

Sampling Reference

Analysis Reference

WCX-427 K-25 RC Lab. Div. Central Files

Works Laboratory Depar...ent
Industrial Hygiene Section

Report Number HA 3263

Copy Number 1

Service Report

Date of Service Trip 4-2-51, 10:15 a. m.

Location: Building Maxon Construction Company Room or Area Storage Yard

G. S. Storer

Samples Taken Air analyses for explosivity and trichlorethylene

Reason for Service Trip Special Investigation

Sampling Positions and Analyses The analyses were made in the valve of the following storage tanks:

Explosivity:

Tank # 78-1008: No explosion hazard

Tank # 78-1009: No explosion hazard

Trichloroethylene

Tank # 78-1008: Less than 75 ppm TCE

Tank # 78-1009: Less than 75 ppm TCE

Remarks No operations were in progress.

Supervisor T. Kwamoto Date April 20, 1951

Sampling Reference

Analysis Reference

WCX-427 K-25 RC Lab. Div. Central Files

WORKS LABORATORY DEPARTMENT

Special Analysis Section

ANALYSIS REPORT

SAMPLE Air sample for HF SEQUENCE NO. SA 2452

DATE REC'D 2/20/52 REQUEST NO.

RESULTS

Bulb #1 = 4 ppm HF

Bulb #3 = 0 ppm HF

REMARKS

SUBMITTED BY Sanders LOCATION 711-1 Y-12

RESULTS APPROVED BY T. Kwasnoski DATE 2/22/52

WORKS LABORATORY DEPARTMENT

Special Analysis Section

Industrial Hygiene Group

ANALYSIS REPORT

SAMPLE Air sample for HF SEQUENCE NO. SA 2452

DATE REC'D 2/14/52 REQUEST NO. 7597

RESULTS

Bulb #2	None found
" #5	" "
" #6	" "
" #7	" "
" #8	" "
" #10	" "

REMARKS

SUBMITTED BY Sanders LOCATION 42 C. ~~Y-11~~-1, Y-12

RESULTS APPROVED BY T. Kwasnoski DATE 2/20/52

WORKS LABORATORY DEPARTMENT C O P Y 916 A

Special Analysis Section

ANALYSIS REPORT

SAMPLE HC Smoke Pot SEQUENCE NO. SA 2210

DATE REC'D June 22, 1951 REQUEST NO. 9680

RESULTS

All of the following data was obtained within 10 feet of the smoke pot:

1. Vapors not explosive.
2. Approximately 1 ppm Cl_2.
3. 100 ppm or 0.01% CO.
4. Less than 25 ppm HCl.
5. No phosgene detected.

REMARKS

SUBMITTED BY B. F. Shinn LOCATION K-1034

RESULTS APPROVED BY ORIGINAL SIGNED BY T. KWASNOSKI DATE June 27, 1951

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 3317

Copy Number 1

Service Report

Date of Service Trip 9/25/51 10:32 a. m. and 10:38 a. m.

Location: Building S - 16 Room or Area Guard tower

A. J. MacDonald

Samples Taken Air samples for fluorine analyses

Reason for Service Trip Special investigation of fluorine concentration around guard tower S - 16.

Sampling Positions and Analyses Samples were taken at face level around booth upon tower:

At 10:32 on east side of booth: 0.4 ppm calculated as F_2

At 10:38 on south side of booth: 0.7 ppm calculated as F_2

Remarks No guard on duty during day. Wind blowing from southwest.

Supervisor T. Kwasnoski Date 9/26/51

Sampling Reference

Analysis Reference

WCX-427 K-25 RC Lab. Div. Central Files

Works Laboratory Department
Industrial Hygiene Section

Report Number HA-3189

Copy Number 1

Service Report

Date of Service Trip 1-30-51 2:00 p.m.

Location: Building K-29 and K-31 Project Sub-Contractor Room or Area Kaighin and Hughes Welding Test Shop G. S. Storer

Samples Taken Air analyses for phosgene.

Reason for Service Trip Special investigation.

Sampling Positions and Analyses The analyses were made immediately above the welder's head:

At 2:00 p.m.: Less than 1 ppm phosgene

At 2:10 p.m.: Less than 1 ppm phosgene

Remarks Normal operations were in progress.

Supervisor T. Iwanoski Date 2-8-51

Sampling Reference

Analysis Reference

WCX-427 K-25 RC Lab. Div. Central Files

Works Laboratory Department
Industrial Hygiene Section

DEC 18 1951

Report Number HA 3498

Copy Number _____

Service Report

Date of Service Trip 12/13/51 3:20 p.m.

Location: Building _____ Room or Area Sanitary water tank.

J. P. Jones

Samples Taken Air analysis for carbon monoxide

Reason for Service Trip Special investigation'

Sampling Positions and Analyses Face level on the floor down inside the tank: No CO detected.

Remarks No smoke pots were in operation at the time of the analysis. Three men were working inside the tank.

Supervisor T. Kuwanobi Date 12/17/51

Sampling Reference _____

Analysis Reference _____

WCX-427 K-25 RC Lab. Div. Central Files

Works Laboratory Department
Industrial Hygiene Section

Report Number HA-3120

Copy Number _____

Service Report

Date of Service Trip 12-21-50 10:00 a.m. - 2:00 p.m.

Location: Building Storage lot Room or Area _____

E. C. Bollinger; V. B. Goddard

Samples Taken air analyses for phosgene

Reason for Service Trip Routine inspection

Sampling Positions and Analyses The atmosphere inside of each of the following numbered cylinders was analyzed for phosgene. No phosgene was found in any of the cylinders. The cylinder identification is by carbide numbers, which follow:

205725 through 205816 91

205829 through 205855 27

205951 through 205981 31

149

Remarks _____

Supervisor T. Kwasnoski Date JAN 17 1951

Sampling Reference _____

Analysis Reference _____

WCX-427 K-25 RC Lab. Div. Central Files

Works Laboratory Department
Industrial Hygiene Section

Report Number HA - 2985

Copy Number 1

Laboratory Central Files K25RC

Service Report

Date of Service Trip 8-9-50 9:45 - 10:00 a.m.

Location: Building _____ Room or Area _____

B. H. Thompson; J. Dykstra

Samples Taken Air samples for fluorine analyses

Reason for Service Trip Routine inspection

Sampling Positions and Analyses

Face level on Blair Road 20 feet east of the R.R. Crossing and approximately 1500 feet north of K-1302: 0.0 ppm F_2

Face level on the patrol road 90 feet west of K-1017-S-9 and approximately 600 feet north of K-1302: 0.0 ppm F_2

Remarks A slight odor of fluorine was noticed in each of the above positions. The wind direction was from south to north.

Supervisor T. Kwasnoski Date 8-15-50

Sampling Reference _____

Analysis Reference _____

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA - 2572

Copy Number 1

Service Report

Date of Service Trip 2-20-50

Location: Building Vault 13-X Room or Area The Three Rooms on the Right Inside the Rear Door to 13-X.

H. R. House

Samples Taken Air analyses for mercury

Reason for Service Trip Special investigation

Sampling Positions and Analyses

Face level throughout the first room on the right: 0.00 mg Hg / cu meter

Face level throughout the second room on the right: 0.00 mg Hg / cu meter

Face level throughout the third room on the right: 0.00 mg Hg / cu meter

Remarks Mercury was noticed on the floor in the third room on the right.

Supervisor E. R. Wagenhals Date 2-27-50

Sampling Reference 941 Page 117

Analysis Reference

wcx-427

WCX-1012 (3-52)
Laboratory Cen Tiles K25RC
Works Laboratory Department
Special Analysis Section

REPORT OF WATER SURVEY ANALYSES

Report No. 4.
Distribution: J. S. Lyon
B. H. Thompson
A. Varland

PLOT NO.	DATE SAMPLED	TIME SAMPLED	SAMPLING LOCATION	URANIUM ppb.	FLUORIDES ppm.	pH	Counts per min/100 ml. ALPHA	Counts per min/100 ml. BETA
PC-1	6/26/52	10:20 AM	Center of Poplar Creek at surface		5.2			
PC-2	"	"	" " " " 3 ft. depth		4.6			
PC-3	"	"	" " " " 6 ft. depth		4.8			
PC-4	"	"	" " " " 15 ft. depth (bottom)		6.4			
			Note: All samples taken from new					
			K-31 bridge opposite K-27					

NOTE: *Alpha counts per minute per 100 ml. water at 50% geometry.*
Beta counts per minute per 100 ml. water at 100% geometry.
All Mud Results per gram dry weight.

T. Kwasowski 7/8/52

Works Laboratory Department
Industrial Hygiene Section

Report Number HA - 1427

Copy Number 1

Service Report

Date of Service Trip 12-12-47

Location: Building F-01 Room or Area Cement Floor Area

H. L. Cobbs; S. C. Barnett (5); M. J. Costello, M.D.

Samples Taken See below

Reason for Service Trip Inspection requested by Mr. H. L. Cobbs.

Sampling Positions and Analyses Air samples were taken in a maximum dust concentration resulting from experimental pneumatic drilling on the cement floor. Wipe samples were taken from a square foot of floor space in the immediate area where drilling had been done. Samples of the cement itself were also taken. Uranium and fluoride analyses and alpha activity determinations were made, and the data is summarized on the attached sheets.

Remarks Sampling locations are identified on the attached floor plan. Air samples on which alpha activity was measured were taken by Mr. H. L. Cobbs simultaneously with the samples taken by this section.

Supervisor D. L. Stoddard Date 1-12-48

Sampling Reference 594 Pages 21, 22

Analysis Reference 557 Pages 73, 74, 75; 575 Page 13

wcx-427

Wipe Test

Pos. #	mg F dust / sq. ft.	mg U / sq. ft.
1	0.1	0.14
2	0.0	0.02
3	0.3	1.00
4	0.1	0.00
5	0.1	0.01
6	0.2	0.00
7	0.2	0.00
8	0.1	0.00

Air Samples

Pos. #	mg F dust / cu meter	mg. U / cu meter
1	0.8	0.00 ✓
2	2.1	0.00
3	2.1	0.04 ✓
4	0.8	0.00
5	1.0	0.04 ✓
6	0.3	0.00
7	0.5	0.00 ✓
8	0.1	0.05

Cement Samples

Pos. #	Wt. Percent U	Alpha Counts / min. / gram sample
1	0.06	90
2	0.03	61
3	0.07	492
4	0.02	10
5	0.05	35
6	0.05	24
7	0.05	34
8	0.04	10

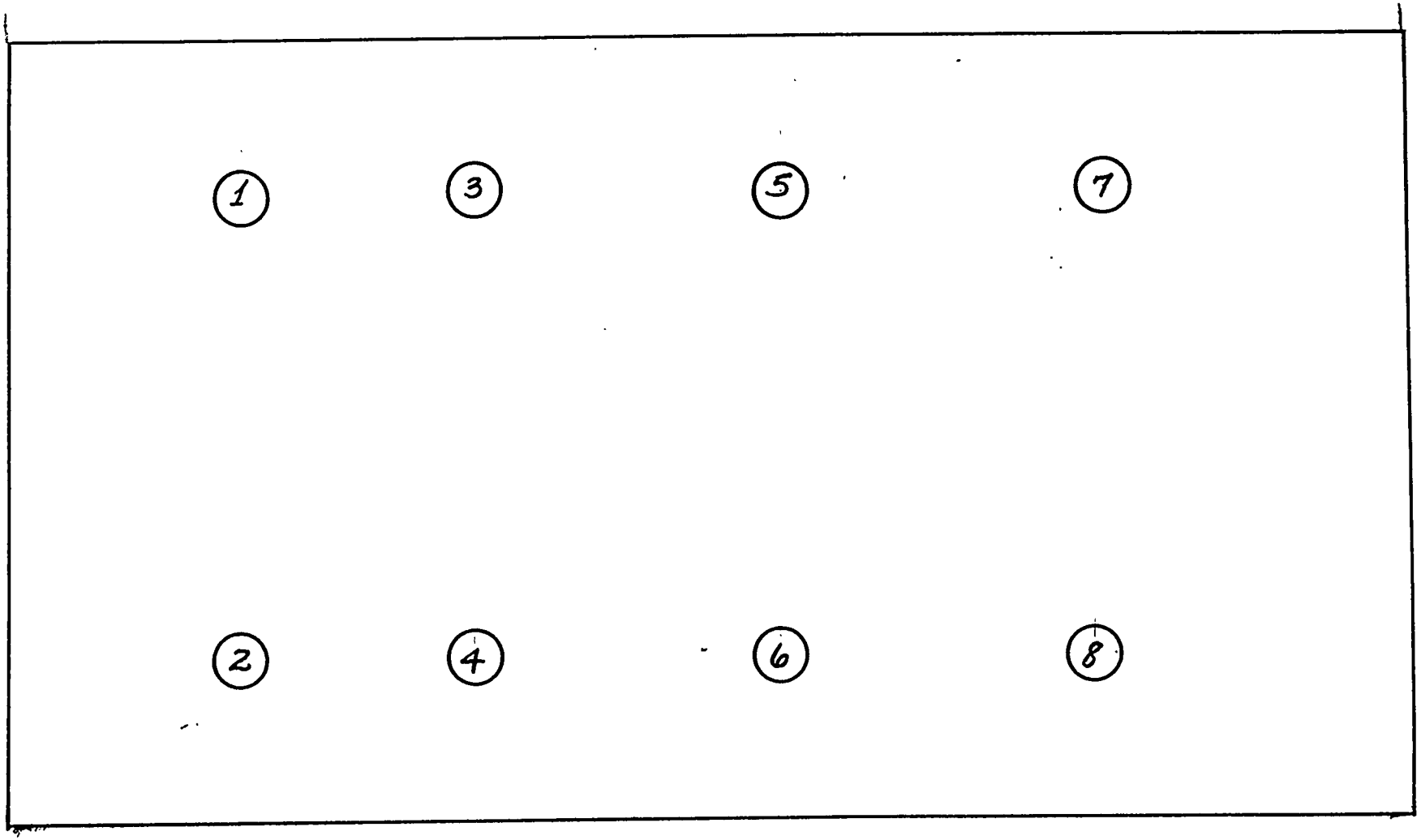


Diagram of the floor of the F-01 building (not drawn to scale)

The approximate sampling positions are indicated by the numbers in the circles.

Approximate dimensions of the floor 90 ft. x 525 ft.

Works Laboratory Department
Industrial Hygiene Section

Report Number IIA 1038

Copy Number 1

Service Report

Date of Service Trip 12-1-47 and 12-2-47

Location: Building _____ Room or Area Storage Lot East of K-25

W. S. Jones

Samples Taken Air analyses for phosgene

Reason for Service Trip Requested by Mr. W. S. Jones

Sampling Positions and Analyses See attached sheet

Remarks

Supervisor C. B. Olszewski Date 12-4-47

Sampling Reference 594 Page 13 and 14

Analysis Reference _____

wcx-427

The atmosphere in each of the C.W.S. cylinders (Carbide numbers except as noted) included below was checked for the presence of phosgene by use of a C.W.S. Chemical Agent Detection Kit M-9. No phosgene was found in the following cylinders.

Serial numbers of cylinders checked C&CCC #194020 through 194146 (194145 and 194070 were missing).

Note: (a) The last three digits of the Carbide number on U.S.A. C.W.S. cylinder number D 31827 were missing. This number probably should be 194145.

(b) The last digit of the Carbide number on U.S.A. C.W.S. cylinder number D 29974 was missing. This number probably should be 194070.

C&CCC #194148
C&CCC #194150 through 194266

C&CCC #194270 through 194328 (194308 missing and 2 were numbered 194309)

Note: All of the digits of the Carbide numbers on U.S.A. C.W.S. cylinder numbers D 31597 and D 31817 were the same. One of these numbers probably should be 194308 and the other 194309.

C&CCC #194330 through 194335
C&CCC #194338 through 194369
C&CCC #191422

Works Laboratory Department
Industrial Hygiene Section

Report Number IIA 1026

Copy Number 1

Service Report

Date of Service Trip 11-5-47

Location: Building _____ Room or Area S-50 Tank Farm; Tank #8

Samples Taken Air analyses for combustibles

Reason for Service Trip Requested by the Safety Department

Sampling Positions and Analyses

Approximately 1 foot inside the hole at the bottom of the tank: No combustibles detected - (Davis Vapotester scale reading 0.0)

Approximately 1 foot inside a manhole on the top of the tank: No combustibles detected - (Davis Vapotester scale reading 0.0)

Approximately 1 foot inside a vent pipe on the top of the tank: No combustibles detected - (Davis Vapotester scale reading 0.0)

Remarks The tank was empty and no repair work was in progress when the analyses were made.

Supervisor W. H. Fetcham Date 11-6-47

Sampling Reference 528 Page 111

Analysis Reference _____

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1301

Copy Number 1

Service Report

Date of Service Trip 10-17-47

Location: Building T-27 Room or Area Metallizing Shop

B. Speyers

Samples Taken Air samples for cadmium analyses

Reason for Service Trip Inspection requested by the Safety Department.

Sampling Positions and Analyses

Face level approximately 3 ft. from the operator who was spraying cadmium: 0.32 mg Cd / cu meter

Approximately 4 ft. above the ground by the doorway: 0.07 mg Cd / cu meter

Face level approximately 15 ft. downwind from the outside exhaust from the air washer: 0.27 mg Cd / cu meter

Remarks The air goes directly into the washer from the operator's position, hence the first two samples were taken between the operator and the source of incoming air. Cadmium was visibly escaping from the air washer exhaust.

Supervisor W. H. Ketcham Date 10-23-47

Sampling Reference BL-257 Page 152

Analysis Reference BL-257 Page 152

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA - 1320

Copy Number 1

Service Report

Date of Service Trip 10-13-47

Location: Building _____ Room or Area S-50 Tank Farm; Tank #8

Samples Taken Air analyses for combustibles and oxygen deficiency

Reason for Service Trip Requested by the Safety Department

Sampling Positions and Analyses

Approximately 3 inches above the floor of the tank by a manhole on the south side:

No combustibles detected - (Davis Vapotester scale reading 0.0)

Approximately 3 inches above the floor of the tank by a manhole on the south side:

Normal oxygen content.

Remarks The tank was empty except for a thin layer of black viscous substance on the floor and walls of the tank. No repair work had been done on the tank when the analyses were made.

Supervisor N. L. Ketchum Date 11-4-47

Sampling Reference 594 Page 3

Analysis Reference _____

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1286

Copy Number 1

Service Report

Date of Service Trip 9-24-47

Location: Building _____ Room or Area Guard Post, F-01 Area

M. F. McDermott; G. M. Hostetter (3)

Samples Taken Air samples for uranium analyses

Reason for Service Trip Routine inspection

Sampling Positions and Analyses

Face level by the guard shack: 0.00 mg U / cu meter

Face level by the gate: 0.00 mg U / cu meter

Remarks

Supervisor T. H. Ketchum Date 10-2-47

Sampling Reference 528 Page 105

Analysis Reference 576 Page 17 - 20

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1275

Copy Number 1

Service Report

Date of Service Trip 9-23-47

Location: Building F-01 Room or Area

H. L. Cobbs; G. M. Hostetter (3)

Samples Taken Air samples for uranium analyses

Reason for Service Trip Routine inspection

Sampling Positions and Analyses

Face level to an operator taking apart a water cooling line at column #10:

0.00 mg U / cu meter

Face level to an operator using a pneumatic chisel on a concrete foundation:

0.00 mg U / cu meter

Face level to an operator dismantling the top of column #14: 0.00 mg U / cu meter

Face level to an operator dismantling the top of column #19: 0.00 mg U / cu meter

Face level to an operator dismantling the top of column #20: 0.00 mg U / cu meter

Remarks Normal dismantling operations in progress.

Supervisor M. W. Ketchum Date 9-25-47

Sampling Reference 528 Page 102

Analysis Reference 576 Page 16

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1285

Copy Number 1

Service Report

Date of Service Trip 9-17-47

Location: Building F-01 Room or Area Dismantling Area

H. L. Cobbs; G. M. Hostetter (3)

Samples Taken Water samples for uranium, fluorides and pH.

Reason for Service Trip Routine inspection

Sampling Positions and Analyses See attached sheet

Remarks The water samples were collected from pools of wash water on the ground floor of the building.

Supervisor N. H. Ketcham Date 10-2-47

Sampling Reference 528 Pages 104, 105

Analysis Reference Report M-28; 516 Pages 17, 20; 557 Page 33,34

wcx-427

RESTRICTED

Between columns #1 and #2: 40 ppm U.
5 ppm fluorides
pH of 7.5

Between columns #8 and #9: 18 ppm U.
4 ppm fluorides
pH of 9.5

Between columns #9 and #10: 100 ppm U.
12 ppm fluorides
pH of 9.0

Between columns #14 and #15: 40 ppm U.
14 ppm fluorides
pH of 9.1

Between columns #17 and #18: 18 ppm U.
11 ppm fluorides
pH of 10.9

Between columns #19 and #20: 20 ppm U
11 ppm fluorides
pH of 8.7

INTER-COMPANY CORRESPONDENCE

(INSERT NAME) COMPANY CARBIDE AND CARBON CHEMICALS CORP. LOCATION Post Office Box P OAK RIDGE, TENN.

TO Mr. E. Speyers
LOCATION K-1401

DATE September 8, 1947

ANSWERING LETTER DATE

ATTENTION

COPY TO M. J. Costello, M.D., K-1003
Dr. F. W. Hurd, K-1004-A
Mr. L. G. Bamer, K-1005
File

SUBJECT Air analyses for oxygen deficiency during the unloading of dry ice from railroad cars.

Dear Mr. Speyers:

In accordance with your telephone request, the oxygen percentage ranges corresponding to the descriptions used in reporting oxygen deficiencies follow:

"Slight oxygen deficiency"	Less than 21% but not less than 19%, O_2 by volume.
"Dangerous oxygen deficiency"	Less than 19%, but not less than 16%, O_2 by volume.
"Dangerous oxygen deficiency" with notation that the atmosphere did not support combustion	Less than 16% O_2 by volume.

From the above it is seen that during unloading of the dry ice cars the personnel breathe from 19 to 21% oxygen when standing erect in the car and less than 19% during the time when bending down. It is doubtful if they would ever breathe concentrations as low as 16% or less for any appreciable periods of time.

Dr. Costello is being supplied the above information by copy of this letter, and if you will advise him of the frequency and duration of the unloading operation, an interpretation of the physiological significance of the job should be possible.

Very truly yours,

N. H. Ketcham

N. H. Ketcham
Industrial Hygiene Section
Works Laboratory

Frank W. Hurd

Works Laboratory Department
Industrial Hygiene Section

Report Number [redacted]

Copy Number 1

Service Report

Date of Service Trip 8-29-47

Location: Building F-01 Room or Area Dismantling Area

H. L. Cobbs; G. M. Hostetter (3)

Samples Taken Air samples for uranium.

Reason for Service Trip Routine inspection

Sampling Positions and Analyses Face level to an operator cutting a water line with a torch on the top of unit #1: 0.00 mg U / cu meter

Face level to an operator cutting a water line with a torch on the top of unit #5: 0.00 mg U / cu meter

Face level to operators removing steam lines from the sampling boxes at the top of unit #14: 0.00 mg U / cu meter

Face level to operators removing exhaust ducts from unit #20: 0.00 mg U/ cu meter

Face level to operators removing steam lines from the top of unit #14: 0.00 mg U/ cu mete

Remarks Operators doing the pipe cutting operations wore dust respirators.

Supervisor [redacted] Date 9-3-47

Sampling Reference 528 Page 89

Analysis Reference 521 Page 128

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Distribution:
Dr. M. J. Costello, K-1003 ✓
Mr. L. G. Bamer, K-1005
Mr. B. Speyers, K-1401
Mr. R. A. Winkel, K-303-1
Mr. G. Sheldon, K-303-7
Mr. W. C. Hartman, K-303-8
Department Office, K-1004-A
Section File, K-1004-D

Report Number HA - 1216

Copy Number 1

Service Report

Date of Service Trip 8-21-47

Location: Building _____ Room or Area Refrigerator Car on Siding North of 12 Street

Samples Taken Air analyses for oxygen deficiency

Reason for Service Trip Laboratory Division Request for Service #7661

Sampling Positions and Analyses See attached sheet

Remarks The refrigerator car door was opened at 2:40 P.M. by Industrial Hygiene personnel. No operators were working in the car while the air analyses were being made. During the sampling period the safety lamp flame was extinguished whenever the probe was placed approximately 6 inches above the floor.

Supervisor W. H. Fetcham Date 8-27-47

Sampling Reference 528 Page 84

Analysis Reference _____

wcx-427

Analyses between 2:40 P.M. and 2:50 P.M.

Face level inside the car: Slight oxygen deficiency

Approximately 4 ft above the floor of the car:
Dangerous oxygen deficiency

Approximately 2½ ft. above the floor of the car:
Dangerous oxygen deficiency

Analyses between 2:50 P.M. and 3:05 P.M.

Face level inside the car: Slight oxygen deficiency

Approximately 4 ft. above the floor of the car:
Dangerous oxygen deficiency

Approximately 2½ ft. above the floor of the car:
Dangerous oxygen deficiency

Analyses between 3:05 P.M. and 3:15 P.M.

Face level inside the car: Slight oxygen deficiency

Approximately 4 ft. above the floor of the car:
Dangerous oxygen deficiency

Approximately 2½ ft. above the floor of the car:
Dangerous oxygen deficiency

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1[illegible]

Copy Number 1

Service Report

Date of Service Trip 8-7-47

Location: Building F-01 Room or Area Area between the F-01 building and the guard shack.

M. F. McDermott

Samples Taken Air samples for uranium analyses

Reason for Service Trip Routine inspection

Sampling Positions and Analyses See attached sheet

Remarks Washing down operations were in progress between 6:00 P.M. and 9:30 P.M. The wind was blowing from the south during the sampling periods.

Supervisor M. H. Ketchan Date 8-12-47

Sampling Reference 528 Page 77

Analysis Reference 521 Page 114-115

wcx-427

The following samples were taken at face level in the positions numbered.

Position #1: At the guard post by the gate north of the F-01 building.

Position #2: Half way between the guard post and the F-01 building.

Position #3: At the north east corner of the F-01 building.

Time	Position Number	Analyses
2:08 P.M.	1	0.00 mg U / cu meter
2:20 P.M.	2	0.00 mg U / cu meter
2:31 P.M.	3	0.00 mg U / cu meter
6:40 P.M.	1	0.00 mg U / cu meter
7:00 P.M.	2	0.00 mg U / cu meter
7:15 P.M.	3	0.00 mg U / cu meter
8:40 P.M.	1	0.00 mg U / cu meter
8:55 P.M.	2	0.00 mg U / cu meter
9:10 P.M.	3	0.00 mg U / cu meter
11:21 P.M.	1	0.00 mg U / cu meter
11:07 P.M.	2	0.00 mg U / cu meter
10:51 P.M.	3	0.00 mg U / cu meter

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1170

Copy Number 1

Service Report

Date of Service Trip 8-1-47

Location: Building F-01 Room or Area Area around the Main Entrance Guard Post M. F. McDermott

Samples Taken Air samples for uranium analyses

Reason for Service Trip Routine Inspection.

Sampling Positions and Analyses

Face level by the guard post: 0.00 mg. U/cu meter

Face level between bldg. F-01 and the guard post, approximately 20 ft. from the guard post: 0.04 mg. U/cu meter.

Face level by the north end of the F-01 bldg.: 0.00 mg. U/cu meter.

Remarks Some dust from the road was stirred up as trucks passed. Samples taken between 1:30 PM and 2:00 PM.

Supervisor T. H. Ketcham Date 8/1/47

Sampling Reference B1 257 p-137

Analysis Reference B1 521 p-109

WCX-427

Works Laboratory Department
Industrial Hygiene Section

Report Number [illegible]

Copy Number 1

Service Report

Date of Service Trip 7-31-47

Location: Building F-01 Room or Area Dismantling Area

H. L. Cobbs

Samples Taken Dust collections for uranium analyses

Reason for Service Trip Routine inspection

Sampling Positions and Analyses See attached sheet

Remarks Dust and / or rust samples were collected at representative places thruout the building. Dismantling operations were in progress.

Supervisor W. H. Ketcham Date 8-12-47

Sampling Reference 528 Page 76

Analysis Reference 521 Page 114, Report No. X-39

wcx-427

Dust Collection Positions	Dust Analyses
Floor level between racks #2 & 3:	0.6% U
Floor level between racks #3 & 4:	0.6% U
Floor level between racks #4 & 5:	2.4% U
Floor level between racks #5 & 6:	1.7% U
Floor level between racks #8 & 9:	5.4% U
Floor level between racks #10 & 11:	2.2% U
Floor level between racks #12 & 13:	1.9% U
Floor level between racks #15 & 16:	0.3% U
Floor level between racks #17 & 18:	0.2% U
Control room above racks #3 & 4:	1.9% U
Control room above racks #5 & 6:	0.1% U
Transfer room above racks #9 & 10:	0.3% U
Control room above racks #12 & 13:	4.9% U
Transfer room above racks #18 & 19:	0.4% U

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1163

Copy Number 1

Service Report

Date of Service Trip 7-28-47

Location: Building F-01 Room or Area Control Room #4 and Transfer Room #3 H. L. Cobbs

Samples Taken Air samples for uranium analyses

Reason for Service Trip Routine Inspection

Sampling Positions and Analyses

Face level, center of control room #4: 0.00 mg. U/cu meter

Face level, center of transfer room #3: 0.00 mg. U/cu meter

Remarks Men were removing instruments in control room #4 during sampling period.

Supervisor J. H. Ferham Date 8-7

Sampling Reference BL 528 P-71

Analysis Reference BL 521 P-108

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Distribution:
Dr. M. J. Costello, K-1003 ✓
Mr. L. G. Bamer, K-1005
Mr. B. Speyers, K-1401
Mr. R. A. Winkel, K-303-1
Mr. G. Sheldon, K-303-7
Mr. W. C. Hartman, K-303-8
Department Office, K-1004-A
Section File

Report Number **HA-1188**

Copy Number **1**

Service Report

Date of Service Trip **7-22-47; 8-7-47 ; 8-11-47; 8-12-47**

Location: Building _____ Room or Area **Refrigerator Cars on Siding North of 12th St.**

Samples Taken **Air analyses for oxygen deficiency**

Reason for Service Trip **Laboratory Division Request for Service #7661**

Sampling Positions and Analyses **See attached sheet**

Remarks _____

Supervisor W. A. Hickam Date **8-19-47**

Sampling Reference **BL-257 Page 136 ; 528 Pages 77-78**

Analysis Reference _____

wcx-427

Date 7-22-47:

Face level inside the car: Normal oxygen content

Approximately 3 ft. above the floor of the car: Normal oxygen content

Approximately 1 ft. above the floor of the car: Dangerous oxygen deficiency

Note: Analyses were made immediately after the car door was opened. The car door had been closed for 12 hours previous to the time the analyses were made.

Date 8-7-47: Between 8:30 A.M. and 9:00 A.M.

Face level inside the car: Slight oxygen deficiency

Approximately 4 ft. above the car floor: Dangerous oxygen deficiency

Approximately 2½ ft. above the car floor:* Dangerous oxygen deficiency

* Safety lamp flame was extinguished.

Date 8-7-47: Between 1:30 P.M. and 2:00 P.M.

Face level inside the car: Slight oxygen deficiency

Approximately 4 ft. above the car floor: Dangerous oxygen deficiency

Approximately 2½ ft. above the car floor:* Dangerous oxygen deficiency

* Safety lamp flame was extinguished.

Date 8-11-47:

Face level inside the car: Slight oxygen deficiency

Approximately 4 ft. above the car floor: Dangerous oxygen deficiency

Approximately 2½ ft. above the car floor:* Dangerous oxygen deficiency

Safety lamp flame was extinguished.

Date 8-12-47:

Face level inside the car: Normal oxygen content

Approximately 4 ft. above the car floor: Dangerous oxygen deficiency

Approximately 2½ ft. above the car floor: Dangerous oxygen deficiency

Note: The car had been emptied of dry ice and was being closed for shipment.

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1170

Copy Number 1

Service Report

Date of Service Trip 7-16-47

Location: Building F-01 Room or Area

James C. Stewart - X 10 : H. L. Cobbs

Samples Taken Air samples for uranium analyses

Reason for Service Trip Routine inspection

Sampling Positions and Analyses

Face level, center of aisle between units #1 and #2: 0.00 mg U / cu meter

Face level, center of aisle between units #13 and #14: 0.00 mg U / cu meter

Face level, center of aisle between units #20 and #21: 0.00 mg U / cu meter

Remarks Dismantling operations in progress inside the building.

Supervisor T. A. Ketcham Date 7-22-47

Sampling Reference BL-528 Page 69

Analysis Reference BL-557 Page 9

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1113

Copy Number 1

Service Report

Date of Service Trip 7-9-47 ✓

Location: Building T-27 Room or Area Metallizing Shop

B. Speyers

Samples Taken Air samples for cadmium analyses

Reason for Service Trip Routine inspection

Sampling Positions and Analyses

Face level just outside of south doorway: 0.5 mg Cd / cu meter

Face level approximately 12 ft. north of building in draft of washed air from shop: 7.7 mg Cd / cu meter

Face level north of building (as above) 10 minutes after above sample: 9.8 mg Cd/ cu meter

Remarks Ventilation draft through building moves from south to north.
Metallizing in progress during all the above sampling periods.

Supervisor J. J. Ketchum Date 7-11-47

Sampling Reference BL-257 Page 134

Analysis Reference BL-257 Page 134

Speyers Notified

WCX-427

Works Laboratory Department
Industrial Hygiene Section

Report Number IIA 1112

Copy Number 1

Service Report

Date of Service Trip 7-9-47

Location: Building _____ Room or Area Refrigeration Car #NX8837 located on the siding north of 12th street

B. Speyers

Samples Taken Air analyses for oxygen deficiency

Reason for Service Trip Initial inspection

Sampling Positions and Analyses Face level to operators unloading "dry ice" from car to truck: slightly deficient oxygen content.

4 feet above floor inside car: slightly deficient oxygen content.

2 feet above floor inside car: dangerous oxygen deficiency.

Remarks Operators stated they worked here for approximately 10 minute periods 4 and 5 times a day.

Supervisor W. H. Fetcham Date 7-11-47

Sampling Reference BL-528 Page 67

Analysis Reference BL-528 Page 67

Speyers - Initialed

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1078

Copy Number 1

Service Report

Date of Service Trip 5-20-47

Location: Building Sandblast Shop Room or Area Air Compressor # 13-3503 CC

B. Speyers

Samples Taken Air analyses for carbon monoxide

Reason for Service Trip Routine inspection

Sampling Positions and Analyses

By air intake to compressor: 0.00 % CO

Inside air mask which the operator had been wearing : 0.00 % CO

Remarks Air compressor was in normal operation when the analyses were being made.

Supervisor N. H. Ketchum Date 5/22/47

Sampling Reference BL-257 Page 125

Analysis Reference BL-257 Page 125

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1077

Copy Number 1

Service Report

Date of Service Trip 5-16-47

Location: Building F-01 Room or Area Unit # 13

Samples Taken Air samples for fluoride and uranium analyses.

Reason for Service Trip Requested by Safety Department

Sampling Positions and Analyses Face level to operator moving dust covered boxes from storage in a room adjacent to unit #13: 0.00 mg U/ cu meter

1.0 mg fluoride dust / cu meter

Remarks No odors noticed. Dust was visible in the air.

Supervisor N. H. Ketcham Date 5/20/47

Sampling Reference BL-528 Page 53 and 54

Analysis Reference BL-528 Page 53; BL-521 Page 81

WCX-427

Dwl 3-5-48 L. Hunt

Works Laboratory Department
Industrial Hygiene Section

Report Number [illegible]

Copy Number 1

Service Report

Date of Service Trip 5-9-47

Location: Building _____ Room or Area Bus and Truck Section of Garage

W. H. McDonald

Samples Taken Air analyses for combustibles

Reason for Service Trip Request from Mr. E. O. Ogle

Sampling Positions and Analyses The air inside the tanks and around the vicinity of the gasoline truck (68C-3507-cc) was tested for the possible presence of combustibles prior to welding on the truck.

No combustibles were found.

Remarks Truck had been thoroughly cleaned with steam and water.

Supervisor W. H. Ketcham Date 5/12/47

Sampling Reference BL-213, Page 90

Analysis Reference _____

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number [illegible]

Copy Number 1

Service Report

Date of Service Trip 4-25-47

Location: Building _____ Room or Area Sand blast shop, steam plant area

B. Speyers

Samples Taken Air analyses for carbon monoxide.

Reason for Service Trip Routine inspection

Sampling Positions and Analyses

Inside the operator's fresh air mask: 0.00 percent CO

By the air intake manifold on the compressor: 0.00 percent CO

At the oil breather pipe on the compressor: 0.00 percent CO

Remarks The air compressor was in operation during the test periods.

Air compressor # 13 - 3503CC

Supervisor W. H. Ketcham Date 4/29/47

Sampling Reference BL-528 Page 50

Analysis Reference BL-528 Page 50

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number IIA 1[illegible]9

Copy Number 1

Service Report

Date of Service Trip 4-24-47

Location: Building _____ Room or Area Sand blast shop, steam plant area.

B. Speyers

Samples Taken Air analysis for carbon monoxide

Reason for Service Trip Routine inspection

Sampling Positions and Analyses

Around the air intake manifold as air was being drawn through: 0.00 per cent CO.

Inside the fresh air mask while air was being supplied from the compressor: 0.00 per cent CO.

Remarks A new air compressor had been installed. (#13-3503-cc)

Supervisor W. H. Ketcham Date 4/28/47

Sampling Reference BL-528 Page 49

Analysis Reference BL-528 Page 49

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 1[illegible]

Copy Number 1

Service Report

Date of Service Trip 4-21-47

Location: Building _____ Room or Area Sand blast Shop, Air compressor # 13-3519 cc

B. Speyers

Samples Taken Air analyses for carbon monoxide.

Reason for Service Trip Request of Safety Department.

Sampling Positions and Analyses

By air intake to air compressor: 0.00 % carbon monoxide.

At air outlet inside air mask: 0.00 % carbon monoxide.

Remarks The exhaust pipe of the air compressor engine had been repaired.

(See report HA - 1036)

Supervisor M. L. Ketchum Date 4/22/47

Sampling Reference BL-257 Page 120

Analysis Reference BL-257 Page 120

cx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA - 1036

Copy Number 1

Service Report

Date of Service Trip 4-17-47

Location: Building _____ Room or Area Sandblast Shop, Air compressor # 13-3519cc

B. Speyers

Samples Taken Air analyses for carbon monoxide.

Reason for Service Trip Request of Safety Department.

Sampling Positions and Analyses

By Air intake to air compressor: 0.15 % carbon monoxide.

At air outlet inside air mask: 0.15 % carbon monoxide.

Remarks This condition might readily have resulted in a fatal accident. The exhaust pipe of the air compressor engine was broken off just above the exhaust manifold. The exhaust gases from the engine were escaping at this point and being blown toward the air intake of the compressor which supplies the air mask.

Supervisor W. H. Ketcham Date 4/22/47

Sampling Reference BL-257 Page 119

Analysis Reference BL-257 Page 119

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number IA 992

Copy Number 1

Service Report

Date of Service Trip 3-14-47

Location: Building - Room or Area Metalizing shack

W. J. Holland

Samples Taken Air samples

Reason for Service Trip Request from Mr. R. A. Carter

Sampling Positions and Analyses

In line with exhaust from washed outlet:

Remarks

Large quantities of dust could be seen coming out exhaust.

Supervisor R. A. Pansey Date 3-14-47

Sampling Reference BL-213 Page 82

Analysis Reference BL-218 Pages 114 & 115

WCX-427

Works Laboratory Department
Industrial Hygiene Section

Report Number IIA 353

Copy Number 1

Service Report

Date of Service Trip 2-27-47

Location: Building _____ Room or Area Southern Railroad Yards

A. F. Becher

Samples Taken Air analyses for combustibles and for oxygen deficiency

Reason for Service Trip Request of Mr. Whiteside, Safety Department

Sampling Positions and Analyses Air near floor and near top of tank car was checked with a Davis Vapotester. There was no indication of combustibles. The air near the floor and near the top of the car was checked with the Wolf Safety Lamp. There was no indication of an oxygen deficiency.

Remarks Tank car had been used to ship transformer oil.

Supervisor W. H. Ketcham Date 2/28/47

Sampling Reference BL-213, Pages 80-81

Analysis Reference _____

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 954

Copy Number 1

Service Report

Date of Service Trip 2-26-47

Location: Building Metalizing Shop Room or Area Outside building in draft of air washer

B. Speyers

Samples Taken Air sample for cadmuim analysis

Reason for Service Trip Routine inspection

Sampling Positions and Analyses

Face level in draft from air washer: 1.1 mg Cd / cu meter

Remarks Air washer operating, Metalizing in progress inside shop.

Supervisor W. H. Ketcham Date 2/28/47

Sampling Reference BL-257 Page 105

Analysis Reference BL-257 Page 105

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 943

Copy Number 1

Service Report

Date of Service Trip 2-20-47

Location: Building Metalizing shack Room or Area Work room and air washer room

B. Speyers

Samples Taken Air samples for cadmium analyses

Reason for Service Trip Routine inspection

Sampling Positions and Analyses

Face level in the work room: 0.03 mg Cd / cu meter

Face level in the work room: 0.02 mg Cd/ cu meter

Face level in the air washer room: 0.01 mg Cd / cu meter

Remarks No metalizing operations had been in progress since the previous day. Doors to shack were kept closed during and prior to taking the air samples. The air washer was not running during the sampling.

Supervisor N H Ketcham Date 2/26/47

Sampling Reference BL-528 Page 34

Analysis Reference BL-528 Page 34

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 942

Copy Number 1

Service Report

Date of Service Trip 2-19-47

Location: Building Metalizing shop Room or Area Work room, washer room and outside in draft of air evacuation duct.

B. Speyers

Samples Taken Air samples for cadmium fume analyses

Reason for Service Trip Routine inspection

Sampling Positions and Analyses

Face level at operators position in work room: 0.06 mg Cd / cu meter

Face level in south end of work room: 0.04 mg Cd / cu meter

Face level in the air washer room: 0.01 mg Cd / cu meter

Outdoors at face level on the ground in the draft of air from the air washer: 0.05 mg Cd / cu meter

Remarks No metalizing had been in progress for about 30 minutes. The air washer was put into operation for the purpose of taking the air sample in its draft, but was not running while the other three samples were taken.

Supervisor N. H. Ketcham Date 2/26/47

Sampling Reference BL-257 Page 103

Analysis Reference BL-257 Page 103

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA 928

Copy Number 1

Service Report

Date of Service Trip 2-17-47

Location: Building Metalizing Shack Room or Area Work room and air washer room

B. Speyers

Samples Taken Air samples for cadmium fume analyses

Reason for Service Trip Initial inspection

Sampling Positions and Analyses Face level to operator spraying cadmium in work room, time 9:50 A.M. (operator wearing fresh air mask): 7 mg Cd / cu meter.

Face level to operator spraying cadmium in work room, time 10:00 A.M. (Operator wearing fresh air mask): 7 mg Cd / cu meter

Face level center of work room during spraying of cadmium, time 10:10 A.M. (Operator wearing fresh air mask): 11 mg Cd / cu meter.

Face level center of work room ten minutes after spraying had stopped.(Operator not wearing mask) 0.5 mg Cd/ cu meter.

Face level in washer room during spraying : 3 mg Cd/ cu meter

Remarks

Operators wear fresh air mask while spraying in work room. Masks removed as soon as spraying is stopped.

Supervisor N.H. Ketcham Date 2/21/47

Sampling Reference BL-257 Page 102

Analysis Reference BL-257 Pages 101, 102

wcx-427

Works Laboratory Department
Industrial Hygiene Section

Report Number HA - 859

Copy Number 1

Service Report

Date of Service Trip 1-8-47

Location: Building _____ Room or Area Storage lot

W. S. Jones

Samples Taken Air analysis for Phosgene

Reason for Service Trip Routine inspection of C.W.S. type chlorine cylinders.

Sampling Positions and Analyses The atmospheres inside the cylinders numbered 706 through 1074 inclusive. (Carbide numbers) were checked for the presence of phosgene by use of a C.W.S. analysis set. All cylinders gave a negative test for phosgene.

Remarks

Supervisor W. H. Ketcham Date 1/14/47

Sampling Reference BL-257 Pages 91-92

Analysis Reference _____

wcx-427

Research and Development Laboratory
Trouble-Shooting Section
Dr. R. H. Lafferty, Jr.
Section Supervisor

Report Number HA 364
Copy Number 1

Industrial Hygiene Service Report

Date of Service Trip 5-21, 5-23, 5-27, 5-29, 6-7-1946

Location: Building xxxxxxxxxxx Room or Area xxxxxxxxxxxxxxxxxx

Line Recorder Stations in K-25 and K-27 areas.

Samples Taken Air analyses for Trichloroethylene.

Reason for Service Trip Request of Safety Department.

Sampling Positions See Attached Survey Report TCE #4.

Analysis of Samples See attached survey report TCE #4.

Remarks

Supervisor H-H Ketcham Date 6/20/46

Sampling Reference BL-257 pages 23, 24, 29 and 34

~~Analytical Reference~~ BL-264 pages 19, 20, and 21

M-1333

Industrial Hygiene Group
Survey Report TCE #4

Air Analyses for Trichloroethylene in the Atmosphere in the Vicinity of the Cold Traps in the Line Recorder Stations.

This survey was conducted at the request of the Safety Department to evaluate the possible exposure of Line Recorder operators to trichloroethylene vapor. All Line Recorder stations in both the K-25 and K-27 areas were covered. All analyses were made in a position approximating that of an operator's face when working over the trichloroethylene dry-ice cold traps. Accordingly, all analyses represent maximum exposure conditions experienced for short periods of time only.

Concentrations of less than approximately 100 ppm. of trichloroethylene by volume in the atmosphere are reported as negative. 73% of the total number of analyses are negative.

The periodic operation of adding replacement quantities of trichloroethylene and dry-ice to the cold traps gave analyses up to 500 ppm. In one case when trichloroethylene had been spilled during the operation analyses up to 800 ppm resulted. These analyses represent 13% of the total number.

Only 14% of the analyses showed results other than negative with no obvious explanation. These 14% gave average analyses of 200 ppm.

The data is tabulated on the following page.

DATE ANALYSIS MADE

Station	5-21-46	5-23-46	5-29-46	6-7-46-	Remarks
311-1 310-3	Negative	100-200 ppm	Negative	Negative	filling trap 5-23
710-2 310-1	Negative	Negative		Negative	
309-3 309-2	Negative	Negative		100-200 ppm	
309-1 301-1	Negative	Negative	Negative	Negative	
301-2 301-3	Negative	Negative		Negative	
301-4 301-5	Negative	Negative		Negative	
302-1 302-2	Negative	Negative	100-200 ppm	Negative	
302-3 302-4	Negative	Negative		Negative	
302-5 303-1	Negative	100-200ppm		Negative	
303-2 303-3	Negative	Negative	Negative	Negative	
303-4 303-5	Negative	300-500 ppm		Negative	
303-6 303-7	Negative	Negative		300-500 ppm	filling trap 6-7
303-8 303-9	Negative	Negative	100-200 ppm	Negative	
303-9 303-10	Negative	Negative		100-200 ppm	
304-1 304-2	Negative	Negative		Negative	
304-3 304-4	300-500 ppm	300-500 ppm	Negative	Negative	filling trap 5-21 and 5-23
304-5 305-1	Negative	Negative		Negative	
305-2 305-3	Negative	Negative		Negative	
305-4 305-5	300-500 ppm	Negative	Negative	Negative	filling trap 5-21
305-6 305-7	Negative	Negative		100-200 ppm	
305-8 305-9	100-200 ppm	Negative		Negative	

CONTINUED NEXT PAGE

Station	5-21-46	5-23-46	5-29-46	6-7-46	Remarks
305-10 305-11	100-200 ppm	100-200 ppm	200-300 ppm	Negative	
305-12 306-1	300-500 ppm	Negative		100-200 ppm	filling trap 5-21
306-2 306-3	300-500 ppm	Negative		300-500 ppm	Filling trap 5-21 and 6-7
306-4 306-5	500-700 ppm	Negative	Negative	300-500 ppm	filling trap 5-21 and 6-7
306-6 306-7	100-200 ppm	300-500 ppm		Negative	filling trap 5-21 and 5-23
312-1 312-2		Negative	Negative	Negative	
312-3	600-800 ppm			Negative	TCE spilled while trap being filled 5-21

Station	5-27-46	6-7-46
402-1 402-2	300-500 ppm	Negative
402-3 402-4	Negative	Negative
402-5 402-6	Negative	300-500 ppm
402-7 402-8	Negative	Negative
402-9	100-200 ppm	Negative

MHA

Research and Development Laboratory
Trouble-Shooting Section
Dr. R. H. Lafferty, Jr.
Section Supervisor

Report Number AEA 239
Copy Number 1

Industrial Hygiene Service Report

Date of Service Trip 5-1-46

Location: Building F-05 (Ferclevelom or Area Reduction Room

Samples Taken Air analyses for combustibility

Reason for Service Trip Request of J. C. Schaffner

Sampling Positions [redacted] analyses at both ends of the reduction furnace, in the hood, and in vicinity of the hydrogen cylinders. Used Davis Vapotester, calibrated for methane.

Analysis of Samples

In the hood: 0.04 units (this is in "safe" range)

Ends of reduction furnace: negative

Near hydrogen cylinders: negative

Remarks

The reduction group will borrow a Davis Vapotester from the Safety Department and continue to check for possible hydrogen leakage.

Supervisor W. H. Ketcham Date 5/8/46

Sampling Reference BL-213, p. 53

Analysis Reference

M-1333

Date April 9, 1946

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 217

Dept. Supervisor Dr. R. H. Lafferty, Jr. Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air analyses for Phosgene			3-28-46

Source of Sample CWS Chlorine Cylinders Section Conditioning Area Pipe Yard

RESULTS: The enclosed air in the 60 cylinders, numbered as below, was tested for phosgene. All tested negative.

Cylinders numbered C & CCC 170067 - 170096, inclusive

Cylinders numbered C & CCC 166963 - 166992, inclusive

Date Book No. BL-213 Page No. 48 Operator R. H. Rainey

MU-24 Supervisor W. H. Ketcham

Date 3-18-46

WORKS LABORATORY SAMPLE REPORT

Department Technical Control — Report No. ____

Department Supervisor T. A. Brantley — Copy No. 1

Time received	Time completed
3-18-46	3-18-46

SAMPLE Recirculating Waters W 289 & W 290

Source of Sample Wet Wells — Section A & B

RESULTS: (over)

Data Book No. 124 — Page No. 13 — Operator Kleinsteuber Davidson

Supervisor T A Brantley MRR

WCX-225

	A	B
pH	7.4	7.2
TS	330	280
TDS	170	160
SS	160	120
Dis O_2	2.3	1.9
Fe	4.4	4.8
PO_3	9	8
Cu	0.15	0.05
SiO_2	1.5	1.5

Date March 6, 1946

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AL/A-215

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air analyses for Phosgene 3/4/46

Source of Sample Chlorine cylinders Section Pipe yard

RESULTS: 30 of the 365 chlorine cylinders in the pipe yard were checked for phosgene by use of the CWS gas test set. All cylinders tested were negative. The cylinder numbers identifying the cylinders tested were as follows: (see reverse side)

Date Book No. HL -213 Page No. 40 Operator R.H. Rainey

MU-24 Supervisor N.H. Ketcham

Sample Sequence No. C&CCC No.	Results Army No.	Time Received C&CCC No.	Completed Army No.
1. 170206	D-24279	16. 170191	D-31468
2. 170205	D-32705	17. 170190	D-37179
3. 170204	D-24346	18. 170189	D-37293
4. 170203	D-36653	19. 170188	D-30557
5. 170202	D-37062	20. 170187	D-30552
6. 170201	D-36542	21 170186	could not No.
7. 170200	D-37105	22. 170185	D-49618
8. 170199	D-40764	23. 170184	D-54139
9. 170198	D-37285	24. 170183	D-75505
10. 170197	D-37196	25.170182	D-75705
11. 170196	D-36873	26. 170181	D-32526
12. 170195	D-37205	27. 170180	D-32503
13. 170194	D-30547	28. 170179	D-32505
14. 170193	D-30558	29. 170178	D-32729
15. 170192	D-33002	30. 170177	D-32715

Date 1-30-46

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. ~~AE/5 206~~

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Combustible Gas analysis 1-30-46

Source of Sample Tank # 13 Section S 50 Tank Farm

RESULTS: A Davis vapotester calibrated for Methane was used. Manholes on south side of tank 2 feet above ground and on top about 3 feet from west side were used for sampling. Strong air current in bottom manhole and out top manhole. The north-eastern areas inside the tank were inaccesible for sampling. Odor of gasoline noticeable particularly at top manhole. (See other side).

Date Book No. BL 213 Page No. 32 Operator N.H. Ketcham

MU-24 Supervisor N.H. Ketcham

Sampling Position			Davis Vapotester Reading
1 foot above water level in tank and 6 ft. to left of south manhole opening			0.05
6 inches above top manhole opening			0.07
1 foot down from top manhole opening			0.05
6 feet down from top manhole opening			0.06
10feet down from top manhole opening			0.05
20 feet down from top manhole opening			0.06
25 feet down from top manhole opening			0.06
Just underneath tank top and 4 ft.from top manhole opening in direction of south manhole			0.05
Just underneath tank top and 4 ft east of top manhole opening			0.04
These results indicate residual gasoline vapors were present but not in explosive concentration.			

Date 1-15-46

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 199

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE C.W.S. Storage Tanks For Phosgene 1-15-46

Source of Sample Tanks stored on loading ramp of XXXXXXXX K-1403

RESULTS: Eight tanks, which had previously been found contaminated with phosgene, had been cleaned out. The tanks were checked again and were found to be free of phosgene. The tanks bore the following C.W.S. numbers: 348, 362, 365, 1770, 3359, 3788, 4133, 5241.

Date Book No. HL 218 Page No. 19 Operator B.J. Ferber

MU-24 Supervisor N.H. Ketcham

Research and Development Laboratory
Trouble-Shooting Section

Report Number _____
Copy Number 1

Dr. R. H. Lafferty, Jr.
Section Supervisor

Industrial Hygiene Service Report

Date of Service Trip 12-17-45 - 8-12-46

Location: Building --- Room or Area Feed Points

J. A. Marshall

Samples Taken Air samples for T analysis.

Reason for Service Trip Survey Report #T-1: Summary Report of T analyses on Air Samples taken in the Feed Points in the K-25 and K-27 areas.

Sampling Positions See Attached

Analysis of Samples See Attached

Remarks

Supervisor W. H. Ketchum Date 8/29/46

Sampling Reference _____

Analysis Reference _____

M-1333

Summary Report of T Analyses On Air Samples Taken in the Feed Points In the K-25 and K-27 Areas

This report summarizes all of the air samples taken for T analysis in the three feed points in use during the period December 17, 1945 thru August 12, 1946, inclusive. The data obtained during the period December 17, 1945 thru February 18, 1946 has not been previously reported. The balance of the data has been reported on Industrial Hygiene Group Service Reports as indicated.

A total of seventy-nine air samples were taken and analyzed for T during the period covered by this report. Of this total number sixty-nine (87%) gave analyses of 0.00 mg. T per cubic meter of air. Ten samples (13%) gave positive analyses, but only four of these (5%) reached or exceeded the generally accepted safe limit of 0.2 mg. T per cubic meter of air. The exposure conditions represented by this 5% of the analyses exist for short periods of time only.

The letters (F) and (A) following the analyses are descriptive of the sampling position. The letter (F) indicates that the air sample was taken at the face level of an operator while he was performing a particular operation. The letter (A) indicates the air sample was taken at approximately face level in a general area where normal operations were in progress but the operating personnel were not necessarily working in that particular area at the time the air sample was taken.

DATE OF SAMPLING	BUILDING	ANALYSIS AS MG. T PER CUBIC METER OF AIR	INDIVIDUAL REPORT NO.	REMARKS-
12-17-45	309-1	0.00 (A)	____	
12-17-45	309-1	0.00 (A)	____	
12-18-45	309-1	0.00 (F)	____	Cylinder being changed.
12-18-45	309-1	0.00 (A)	____	
12-18-45	309-1	0.00 (A)	____	
12-19-45	309-1	0.00 (A)	____	
12-20-45	309-1	0.00 (A)	____	
1-4-46	309-1	0.3 (A)	____	Normal operations in progress.
1-21-46	402-4	0.00 (A)	____	
1-23-46	402-4	0.00 (A)	____	
1-23-46	402-4	0.5 (A)	____	Cylinders being changed. C-616 "smoke" visible.
1-23-46	402-4	0.00 (A)	____	
1-24-46	402-4	0.00 (A)	____	
1-30-46	131	0.00 (A)	____	
1-30-46	402-4	0.00 (A)	____	
2-1-46	402-4	0.00 (A)	____	
2-6-46	131	0.00 (A)	____	
2-8-46	402-4	0.00 (A)	____	
2-11-46	131	0.00 (A)	____	
2-11-46	131	0.01 (F)	____	Maintenance crewman cutting valve out of transfer line.
2-11-46	131	0.00 (F)	____	Installing new valve.
2-18-46	131	0.00 (A)	____	
2-18-46	402-4	0.00 (A)	____	

DATE OF SAMPLING	BUILDING	ANALYSIS AS MG.T PER CUBIC METER OF AIR	INDIVIDUAL REPORT NO.	REMARKS
5-1-46	131	0.00 (A)	AEA 238	
5-1-46	131	0.00 (A)	AEA 238	
5-1-46	131	0.00 (A)	AEA 238	
5-1-46	131	0.00 (A)	AEA 238	
5-6-46	131	0.2 (F)	AEA 258	Sampling cylinder being disconnected. C-616 "smoke" visible.
5-6-46	131	0.01 (A)	AEA 258	Five minutes after sampling cylinder disconnected.
5-6-46	131	0.03 (A)	AEA 258	Large cylinders being changed.
5-14-46	131	0.00 (A)	AEA 272	
5-14-46	131	0.00 (A)	AEA 272	
5-9-46	131	0.00 (A)	AEA 275	
5-9-46	131	0.00 (A)	AEA 275	
5-9-46	131	0.00 (A)	AEA 275	
5-15-46	131	0.00 (F)	AEA 283	Operator taking a sample.
5-15-46	131	0.00 (A)	AEA 283	
5-17-46	131	0.00 (F)	AEA 286	Operator taking a sample.
5-17-46	131	0.00 (A)	AEA 286	
5-21-46	131	0.00 (A)	HA 302	
5-21-46	131	0.00 (A)	HA 302	
5-23-46	131	0.00 (A)	HA 309	

DATE OF SAMPLING	BUILDING	ANALYSIS AS MG.T PER CUBIC METER OF AIR	INDIVIDUAL REPORT NO.	REMARKS
5-23-46	131	315.0 (A)	HA 309	Valve on a large cylinder failed, releasing almost entire cylinder into the atmosphere.
5-23-46	131	0.01 (A)	HA 309	After above leak, as soon as C-616 "smoke" no longer visible.
5-24-46	131	0.00 (A)	HA 311	
5-24-46	131	0.00 (A)	HA 311	
5-27-46	131	0.00 (A)	HA 319	
5-27-46	131	0.00 (F)	HA 319	Feed lines being removed.
5-29-46	131	0.00 (A)	HA 326	
5-29-46	131	0.00 (A)	HA 326	
6-3-46	131	0.00 (A)	HA 334	
6-3-46	131	0.00 (A)	HA 334	
6-3-46	131	0.00 (A)	HA 334	
6-11-46	131	0.00 (A)	HA 358	
6-11-46	131	0.00 (A)	HA 358	
6-17-46	131	0.00 (A)	HA 375	
6-17-46	131	0.00 (A)	HA 375	
6-17-46	131	0.00 (A)	HA 375	
6-24-46	131	0.00 (A)	HA 395	
6-24-46	131	0.00 (A)	HA 395	
7-1-46	131	0.00 (A)	HA 416	

DATE OF SAMPLING	BUILDING	ANALYSIS AS MG.T PER CUBIC METER OF AIR	INDIVIDUAL REPORT NO.	REMARKS
7-1-46	131	0.00 (A)	HA 416	
7-1-46	131	0.00 (A)	HA 416	
7-1-46	131	0.1 (F)	HA 416	Cylinder being disconnected. G-616 "smoke" visible
7-8-46	131	0.00 (A)	HA 430	
7-8-46	131	0.00 (A)	HA 430	
7-15-46	131	0.00 (A)	HA 441	
7-15-46	131	0.00 (A)	HA 441	
7-23-46	131	0.00 (A)	HA 462	
7-23-46	131	0.00 (A)	HA 462	
7-29-46	131	0.00 (A)	HA 467	
7-29-46	131	0.02 (A)	HA 467	Normal operations in progress.
7-29-46	131	0.00 (A)	HA 467	
8-5-46	131	0.00 (A)	HA 483	
8-5-46	131	0.00 (A)	HA 483	
8-5-46	131	0.00 (A)	HA 483	
8-12-46	131	0.00 (A)	HA 512	
8-12-46	131	0.00 (A)	HA 512	
8-12-46	131	0.00 (A)	HA 512	

Research and Development Laboratory
Trouble-Shooting Section
Dr. R. H. Lafferty, Jr.
Section Supervisor

Report Number ____
Copy Number 1

Industrial Hygiene Service Report

Date of Service Trip **12-12-45 - 8-12-46**

Location: Building **---** Room or Area **Withdrawal Points**

J. A. Marshall

Samples Taken **Air samples for T analysis**

Reason for Service Trip **Survey Report #T-21 Summary Report of T Analyses on Air Samples Taken in the Withdrawal Points in the K-25 and K-27 Areas.**

Sampling Positions **See Attached.**

Analysis of Samples **See Attached.**

Remarks

Supervisor W H Vetcham Date 8/29/46

Sampling Reference

Analysis Reference

M-1333

Industrial Hygiene Group
Survey Report #T - 2

Summary Report of T Analyses on Air Samples Taken in the Withdrawal Points in the K-25 and K-27 Areas

This report summarizes all of the air samples taken for T analysis in the four withdrawal points in use during the period December 12, 1945 thru August 12, 1946, inclusive. The data obtained during the period December 12, 1945 thru February 18, 1946 has not been previously reported. The balance of the data has been reported on Industrial Hygiene Group Service Reports as indicated.

A total of seventy-seven air samples were taken and analyzed for T during the period covered by this report. Of this total number, seventy samples (91%) gave analyses of 0.00 mg. T per cubic meter of air. Seven samples (9%) gave positive analyses, but only two of these (2.6%) exceeded the generally accepted safe limit of 0.2 mg. T per cubic meter of air. The exposure conditions represented by this 2.6% of the analyses existed for short periods of time only.

The letters (F) and (A) following the analyses are descriptive of the sampling position. The letter (F) indicates that the air sample was taken at the face level of an operator while he was performing a particular operation. The letter (A) indicates the air sample was taken so as to be representative of an area where normal operations were in progress, but the operating personnel were not necessarily working in that particular area at the time the air sample was taken.

DATE OF SAMPLING	BUILDING	ANALYSIS AS MG. T PER CUBIC METER OF AIR	INDIVIDUAL REPORT NO.	REMARKS-
12-12-45	311-1	0.00 (A)	———	
12-16-45	601	0.00 (F)	———	
12-16-45	601	0.00 (F)	———	
12-17-45	311-1	0.00 (A)	———	
12-17-45	311-1	0.00 (A)	———	
12-17-45	601	0.00 (A)	———	
12-20-45	311-1	0.00 (A)	———	
12-20-45	311-1	0.00 (A)	———	
12-20-45	311-1	0.02 (A)	———	C-616 "smoke" visible while cylinder being changed.
1-4-46	601	0.00 (A)	———	
1-5-46	601	0.00 (A)	———	
1-5-46	402-9	0.00 (A)	———	
1-21-46	402-9	0.00 (A)	———	
1-23-46	402-9	0.00 (A)	———	
1-23-46	402-9	0.4 (A)	———	C-616 "smoke" visible while cylinder being changed.
1-24-46	402-9	0.00 (F)	———	
1-24-46	402-9	0.00 (F)	———	
1-30-46	631	0.00 (A)	———	
2-6-46	631	0.00 (F)	———	
2-18-46	631	0.00 (A)	———	
5-1-46	631	0.00 (A)	AEA 240	
5-1-46	631	0.00 (A)	AEA 240	
5-6-46	631	0.00 (F)	AEA 252	
5-6-46	631	0.1 (F)	AEA 252	C-616 "smoke" visible while cylinder being changed.
5-6-46	631	0.05 (F)	AEA 252	Six feet from cylinder being changed. C-616 "smoke" visible
5-6-46	631	0.05 (A)	AEA 252	General area immediately after change completed.
5-6-46	631	0.00 (A)	AEA 252	General area 10 minutes after change completed.
5-9-46	631	0.00 (A)	AEA 274	
5-9-46	631	0.00 (A)	AEA 274	
5-9-46	631	0.00 (A)	AEA 274	
5-14-46	631	0.00 (A)	AEA 273	
5-14-46	631	0.00 (A)	AEA 273	
5-14-46	631	0.00 (A)	AEA 273	
5-15-46	631	0.00 (A)	AEA 282	

DATE OF SAMPLING	BUILDING	ANALYSIS AS MG. T PER CUBIC METER OF AIR	INDIVIDUAL REPORT NO.	REMARKS-
5-15-46	631	0.00 (A)	AEA 282	
5-15-46	631	0.00 (A)	AEA 282	
5-17-46	631	0.00 (A)	AEA 287	
5-17-46	631	0.00 (A)	AEA 287	
5-17-46	631	0.01 (A)	AEA 287	
5-21-46	631	0.00 (A)	HA 301	
5-21-46	631	0.00 (A)	HA 301	
5-21-46	631	0.00 (A)	HA 301	
5-23-46	631	0.00 (A)	HA 310	
5-23-46	631	0.00 (A)	HA 310	
5-23-46	631	0.00 (A)	HA 310	
5-27-46	631	0.4 (A)	HA 320	Sampling line broke. C-616 "smoke" visible.
5-27-46 /	631	0.00 (A)	HA 320	15 minutes after above leak.
5-27-46	631	0.00 (A)	HA 320	During decontamination, 40 minutes after above leak
5-29-46	631	0.00 (A)	HA 327	
5-29-46	631	0.00 (A)	HA 327	
5-29-46	631	0.00 (A)	HA 327	
6-3-46	631	0.00 (A)	HA 333	
6-3-46	631	0.00 (A)	HA 333	
6-3-46	631	0.00 (A)	HA 333	
6-10-46	631	0.00 (A)	HA 353	
6-10-46	631	0.00 (A)	HA 353	
6-10-46	631	0.00 (A)	HA 353	
6-17-46	631	0.00 (A)	HA 374	
6-17-46	631	0.00 (A)	HA 374	
6-17-46	631	0.00 (A)	HA 374	
6-24-46	631	0.00 (A)	HA 394	
6-24-46	631	0.00 (A)	HA 394	
7-1-46	631	0.00 (A)	HA 406	
7-1-46	631	0.00 (A)	HA 406	
7-1-46	631	0.00 (A)	HA 406	
7-8-46	631	0.00 (A)	HA 428	
7-8-46	631	0.00 (A)	HA 428	
7-15-46	631	0.00 (A)	HA 440	
7-15-46	631	0.00 (A)	HA 440	
7-25-46	631	0.00 (A)	HA 464	
7-25-46	631	0.00 (A)	HA 464	
7-29-46	631	0.00 (A)	HA 468	
7-29-46	631	0.00 (A)	HA 468	
8-5-46	631	0.00 (A)	HA 482	
8-5-46	631	0.00 (A)	HA 482	
8-12-46	631	0.00 (A)	HA 511	
8-12-46	631	0.00 (A)	HA 511	

Dr. Kammer

NH

Date November 25, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene — Report No. AEC 180

Dept. Supervisor E. Staple — Copy No. 1

Description — Sequence No. — Time Received — Time Completed 11/20/45

SAMPLE Residue in Tank Cars U.S.Q.X.-10034 and U.S.Q.X.-10023

Source of Sample — Section

RESULTS: A visual inspection was made. The valve heads were covered with material resembling crude oil. Samples of residue drawn from the bottom of the cars contained an oil-water mixture with kerosene odor. This evidence indicated that the cars had been used for transporting crude oil.

Date Book No. BL 133 — Page No. 138 — Operator R.H. Rainey

MU-24

Supervisor N.H. Ketcham

N H Ketcham

D. Kammer

NHK

Date July 16, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 117

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air analysis for unknown contaminant. July 2, 5, and 9, 1945.

Source of Sample Fercleve Process Area Section Manhole behind Conditioning Lab

RESULTS: Three trips were made, during which sampling was done and tests made to determine if the following contaminants were present. Arsenicals, phosgene, H_2S, NH_3, fluorides, chlorides, acid gases, CO_2, O_2, CO, H_2, and "combustibles". A positive test for chlorinated hydrocarbons was obtained. At no time did we find more than about 200 ppm chlorinated hydrocarbon present The workers said that at times there was a "definite" odor in the manhole, and upon being given a sample of trichloroethylene to smell identified it as the contaminant. A trace of "combustibles" was also found. Periodic TCE and "combustibles" tests will be run for a few weeks.

Date Book No. BL-69 Page No. 77-78 Operator B.I.Ferber

MU-24 Supervisor N.H. Ketcham

N.H. Ketcham

Dr. Kammer

~~CONFIDENTIAL~~

WORKS ~~LABORATORY SAMPLE REPORT~~

Date July 18, 1945

1949 INV.-B

Department Industrial Hygiene Report No. AEA 120

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air samples for T analysis.		June 27, 1945	

Source of Sample Fercleve Section Conditioning Lab.

RESULTS: Sample #1: Taken at front end of, and slightly above water level of capsule bath. Analysis: 0.2 mg.T/cubic meter.

Sample #2: Taken three feet from a material container, three feet [redacted] above floor level, while one "120 capsule" was being transferred. Analysis: 0.07 mg.T/cubic [redacted] meter

Sample #3: A general room sample taken approximately five feet above floor level. Analysis: 0.03 mg.T/cubic meter.

Date Book No. BL-60 Page No. 75 Operator D.Weinberger

MU-24

Supervisor N.H. Ketcham

~~CONFIDENTIAL~~

See reverse side

Completed

Time Received

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Kennedy 5/7/64

By C. J. Barr Date 5/22/64

Results

ple uence No.

CONFIDENTIAL

WORKS LABORATORY SAMPLE REPORT

Date July 18, 1945

Department Industrial Hygiene

Report No. AE # 121

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for T analysis: July 6, 1945

Source of Sample Fercleve Section Conditioning Lab.

RESULTS: Sample #1: Taken in "West" hood while several capsules were being flamed out. Analysis: 14.1 mg.T/cubic meter. (Heavy clouds of C6616 were escaping into the room during this operation.)

Sample #2: Taken in center of room near operators transferring from capsules to container. Analysis: 0.2 mg.T/cubic meter.

Sample #3: Taken in "East" hood. Analysis: 0.3 mg.T/cubic meter. (No work going on in this hood during sampling.)

Date Book No. BL-69 Page No. 80, 83, 85. Operator B.I. Ferber

MU-24

#387 11-15-47

Supervisor N.H. Ketcham

See reverse side

CONFIDENTIAL

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Harwell 5/7/64
By L. J. Baring Date 5/21/64

Sample Sequence No.	Results	Time Received	Completed

MU-24a

Dr. Kummer

NHK

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WORKS LABORATORY SAMPLE REPORT

Date July 25, 1945

Department Industrial Hygiene

Report No. AEH 124

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for T analysis. Samples taken 7/21/45

Source of Sample Fercleve Section Conditioning Lab.

RESULTS: Sample #1: Taken immediately outside North hood while there was no work in progress in the hood. Analysis: 0.00 mgT/cu. m

Sample #2: Taken in center of room while a moderate amount of normal transfer operations in progress. Analysis: 0.04 mgT/cubic meter.

Date Book No. BL-69 Page No. 93,94,97,98 Operator B.I.Ferber

MU-24

#382 11-15-47 [illegible]

CONFIDENTIAL Supervisor N.H. Ketcham

[signature]

See reverse side

Completed																				
Time Received																				
Results																				
Sample Sequence No.																				

CLASSIFICATION CHANGED TO Unclassified
By authority of W. Z. Harwell 5/7/64
By [signature] Date 5/23/64

U-24a

Dr. Faucett

NHA

Date July 25, 1945

WORKS ~~LABORATORY SAMPLE REPORT~~

Industrial Hygiene

Department

Report No. AEF 125

Dept. Supervisor E. Staple

~~Copy No.~~ 1

Description	Sequence No.	Time Received	Time Completed

SAMPLE Air sample for T analysis. Sample taken 7/21/45

Source of Sample Fercleve Section Technical Division Workshop

RESULTS: The sample taken immediately above the surface of the work bench while no work was in progress. Analysis: 0.04 mgT/cubic meter.

Date Book No. BL-69 Page No. 93,97 Operator B.I.Ferber

MU-24

#385 4-5-11 Ayres

Supervisor N.H. Ketcham

See reverse side

Sample Sequence No.	Results	Time Received	Completed

CLASSIFICATION CHANGED TO Unclassified
By authority of W. F. Friedell 5/7/64
By C. J. Bar Date 5/22/64

J-24a

Dr. Kammer

Date July 28, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 127

Dept. Supervisor E. Staple Copy No. 1

Samples taken 7/24/45

Description Sequence No. Time Received Time Completed

SAMPLE Air analysis for Chlorinated Hydrocarbon, CO_2, O_2, CO, H_2, and Combustibles.

Source of Sample Fercleve Section Manhole in Process Area

RESULTS: Chlorinated Hydrocarbon analysis showed 100-200 ppm. (Note: This is assumed to be Trichlorethylene, based upon previous qualitative identification by odor.) Analysis for CO_2, O_2, CO, and H_2, showed nothing unusual. No Combustibles were present.

Date Book No. BL-69 Page No. 98 Operator B.I.Ferber

MU-24 Supervisor N.H.Ketcham

W Priest

WORKS LABORATORY SAMPLE REPORT

CONFIDENTIAL

Date August 1, 1945

Department Industrial Hygiene

Report No. AEC 132

1949 INV.-E

Dept. Supervisor E. Staple

Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Soil sample of [redacted] for T analysis. Sample taken 7/27/45			

Source of Sample Fercleve Section Area under Conditioning Bldg

RESULTS: The sample of soil was taken from under the conditioning building at about the center of the building.

Analysis: 7 micrograms (.007 mg.) T/gram of dry soil.

Date Book No. BL-69 & 19 Page No. 99,104,121 Operator B.I.Ferber E. Feathers

MU-24

Supervisor N.H.Ketcham

#384 Copy 11-15-45

CONFIDENTIAL

CLASSIFICATION CHANGED TO Unclassified
By authority of W. T. Harwell 5/7/64
By [illegible] Date 5/22/64

Sample Sequence No.	Results	Time Received	Completed

1-24a

Dr. Kamm

Date August 1, 1945

WORKS LABORATORY SAMPLE REPORT

1949 INV. B

Department Industrial Hygiene CONFIDENTIAL Report No. AEA 133

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air sample for T analysis: Sample taken 7/27/45

Source of Sample Fercleve Section Technical Division Workshop

RESULTS: The sample was taken at approximately the work bench level.

No work was going on.

Analysis: 0.01 mg.T/cubic meter.

Date Book No. BL-69 Page No. 99-101 Operator B.I.Ferber

MU-24 #383 11-15-47 mgc.

CONFIDENTIAL Supervisor N.H.Ketcham

See memo a

Sample Sequence No.	Results	Time Received	Completed

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Marshall 5/7/64
By [signature] Date 5/22/64

Dr. Kammer

WORKS LABORATORY SAMPLE REPORT

CONFIDENTIAL

Date August 1, 1945

Department Industrial Hygiene   Report No. AEA 134

1949 INV.-B

Dept. Supervisor E. Staple   Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for T analysis. Samples taken 7/27/45

Source of Sample Fercleve   Section Conditioning Lab.

RESULTS: Sample #1: Taken in the center of the transferring area at face level near an operator transferring from a capsule to a pot. Analysis: 0.14 mg.T/cubic meter.

Sample #2: Taken immediately above the surface of the transferring table. No transfer work being done. Analysis: 0.01 mg.T/cu.meter

Date Book No. BL-69   Page No. 99,101   Operator B.I.Ferber

MU-24   #382 11-15-47 mcp.

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Supervisor N.H.Ketcham

[signature]

See reverse side

Sample Sequence No.	Results	Time Received	Completed

CLASSIFICATION CHANGED TO Unclassified
By authority of W. Z. Harwell 5/7/64
By C. J. Bar[illegible] Date 5/21/64

T-2/a

Dr. Kammer

Date August 10, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene

Report No. AEF 139

Dept. Supervisor E. Staple

Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air samples for T analysis. August 2, 1945			

Source of Sample Fercleve Section Conditioning Lab.

RESULTS: Sample #1: Taken in transfer area at approximately face level of operator trans[redacted]g material from a capsule to a pot. Analysis: 0.04 mg.T/cubic meter.

Sample #2: Taken at table top level on transfer bench, while no transfer operations going on. Analysis: 0.01 mg.T/cu. m

Date Book No. BL-69 Page No. 105 Operator B.I.Ferber

MU-24

Supervisor N.H.Ketcham

#381 11-15-47 mkp.

See reverse

CLASSIFICATION CHANGED TO Unclassified

By authority of W. L. Harwell 5/7/64

By C. J. Barney Date 5-21-64

Sample Sequence No.	Results	Time Received	Completed

D. Rammer

VHI

Date August 11, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEH 141

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air samples from manhole.		August 9, 1945	

Source of Sample Fercleve Process Area Section

RESULTS: No chlorinated hydrocarbons present.

Gas analysis for CO_2, O_2, CO, H_2 and combustibles showed 1.5% combustibles, by volume. Normal volumes of other constituents.

Date Book No. BL-69 Page No. 108 Operator B.I.Ferber

MU-24 Supervisor N.H.Ketcham

c JVPuent

Dr. Kammer

~~CONFIDENTIAL~~

Date August 13, 1945

WORKS LABORATORY SAMPLE REPORT

1949 INV.-B

Department Industrial Hygiene Report No. AEA 143

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air samples for T analysis.		August 10, 1945	

Source of Sample Fercleve Section Conditioning Shop

RESULTS: Sample #1: Taken at face level, approximately three feet from an operator opening 120 capsules. Analysis: less than 0.01 mg.T/cubic meter.

Sample #2: Taken in area of transfer bench, just outside space covered by hood. Observed ~~slight visible leak of C-616~~ but hood appeared to pull it well. Analysis: less than 0.01 mg.T/cu.m.

Date Book No. BL-69 Page No. 108-109 Operator B.I.Ferber

MU-24

#3806 11-15-47 Dept.

~~CONFIDENTIAL~~ Supervisor N.H.Ketcham

W Priest. See reverse side

Sample Sequence No. | Results | Time Received | Completed

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Hamrick 5/27/64
By L. G. Bass Date 5/27/64

U-24a

Memo to Dr. C. J. Hamme

CONFIDENTIAL

YHK

Date August 28, 1945

WORKS LABORATORY SAMPLE REPORT

1949 INV.

Department Industrial Hygiene Report No. AEA 147

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for T analysis. August 17, 1945

Source of Sample Fercleve Section Conditioning Shop.

RESULTS: Sample #1: Taken from position approx. eight feet from north hood and six feet fn front of north work bench. Normal work going on both in hood and on bench. Analysis: 0.21 mg.T/cubic meter.

Sample #2: Taken approx. five feet from the large transfer bench ~~about four feet above floor level. C-616 frequently escaping~~ during transfer operations. Blue haze in air. ~~Analysis: 1.05 mg.T/cubic meter.~~

Date Book No. BL-133 Page No. 38 Operator J.D.Oliphant

MU-24

#379 11-15-47 SmRP

Supervisor N.H.Ketcham

CONFIDENTIAL

See reverse side

Sample Sequence No.	Time Received	Completed	Results

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Harwell 5/7/64
By C. J. Hamme Date 5/12/64

U-24a

Dr. Kammer

NHK

Date August 30, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 152

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples, taken August 18, 1945

Source of Sample Fercleve, Process Area Section Manhole behind process bldg.

RESULTS: Air analysis for chlorinated hydrocarbon showed presence of 100 ppm This is assumed to be Trichloroethylene, based upon previous qualitative identification by odor.

Gas analysis of dry air sample showed the following:

CO_2---0.0 % by volume
O_2---20.7 % by volume
CO---0.1 % by volume
H_2--0.7 % by volume
Combustibles--0.6 % by vol.

Date Book No. BL-133 38
BL-107 Page No. 116-117 Operator J.D.Oliphant

MU-24

Supervisor N.H.Ketcham

Dr. Kammer

~~CONFIDENTIAL~~

Date September 10, 1945

~~WORKS LABORATORY SAMPLE REPORT~~

Department Industrial Hygiene Report No. AEA 157

Dept. Supervisor E. Staple Copy No. 1

1949 INV.-B

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air samples for T analysis.		September 6, 1945	

Source of Sample Fercleve Section Conditioning Shop.

RESULTS: Sample #1: Taken just outside large transfer hood, approx. four feet above floor level, immediately to the left of workers transfering product from one 120 capsule. Analysis: 0.04 mg.T/cubic meter of air.

Sample #2: Taken four feet from back of capsule bath, approx. four feet above floor level, and approx. four feet behind worker doing usual transfer operations. Analysis: 0.03 mg.T/cubic meter of air.

Date Book No. BL-60 Page No. ~~104-105~~ Operator D.Weinberger

N.H.Ketcham

MU-24

#378 11-15-47 mwp

~~CONFIDENTIAL~~ Supervisor

See reverse side

Sample Sequence No.	Results	Time Received	Completed

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Hammack 5/11/64
By L. G. Beaman Date 5-21-64

T-24a

Dr. Kammer

NHK

Date July 18, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 122

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air analysis for Phosgene. July 16 & 17, 1945

Source of Sample Decontamination Section Conditioning Building Section CWS Chlorine Tanks in Cond. Bldg. Storage Yard.

RESULTS: The following fifty tanks all tested negative.

CWS 330	CWS 366	CWS 382	CWS 479	CWS 519	CWS 562	CWS612
CWS 332	CWS 367	CWS 390	CWS 480	CWS 524	CWS 568	CWS630
CWS 334	CWS 369	CWS 401	CWS 481	CWS 534	CWS 571	
CWS 339	CWS 370	CWS 402	CWS 486	CWS 546	CWS 578	
CWS 345	CWS 374	CWS 405	CWS 493	CWS 547	CWS 584	
CWS 358	CWS 378	CWS 474	CWS 495	CWS 550	CWS 587	
CWS 361	CWS 379	CWS 475	CWS 497	CWS 551	CWS 589	
CWS 362	CWS 380	CWS 776	CWS 514	CWS 554	CWS 605	

Date Book No. BL-69 Page No. 88-89 Operator B.I.Ferber

MU-24

Supervisor N.H. Ketcham

Dr. Ketcham

NHK

Date July 17, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 118

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air analysis for Phosgene. June 30, 1945.

Source of Sample Conditioning Bldg. Section Decontamination.

RESULTS: The following cylinders had previously been rejected as contaminated. They had been steamed for eight hours, prior to being retested. The retest showed negative for all nine.

A952, A 1379, A2828, A3296, A4083, A6081, A6347, A6359, A6373.

Date Book No. BL-69 Page No. 76-77 Operator B.I. Ferber

MU-24 Supervisor N.H. Ketcham

N.H. Ketcham

Dr. Kamm

CONFIDENTIAL

WORKS LABORATORY SAMPLE REPORT

Date July 17, 1945

NHK

1945 NV.-E

Department Industrial Hygiene Report No. AEA 119

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air sample for T analysis. July 6, 1945

Source of Sample Fercleve Section Technical Division Workshop

RESULTS: A general room sample was taken approximately four feet above the floor. Analysis: 1.1 mg.T/cubic meter.

Date Book No. BL-69 Page No. 80,83,85 Operator B.I.Ferber

MU-24

#389 11-15-47 dhp

CONFIDENTIAL

Supervisor N.H. Ketcham

See reverse side

Sample Sequence No.	Results	Time Received	Completed
	CLASSIFICATION CHANGED TO Unclassified By authority of W. F. Hammell 5/7/64 By C. J. Kamm Date 5/21/64		

MU-21a

Dr. Kammer

MHK

Date June 26, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 108

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples from CWS Chlorine Tanks in the Conditioning Bldg. Storage Yard.

Source of Sample Section

RESULTS: The following tanks tested negative to the Phosgene indicator. A7, A341, A599, A761, A900, A1460, A1996, A2663, A2699, A3535, A4340, A4745, A5516, A52, A345, A637, A768, A902, A1499, A2013, A2159, A2993, A3945, A4344, A5141, A5578, A254, A350, A730, A901, A1230, A1592, A2417, A2967 A2962, A4109, A4358, A5330, A5607, A328, A490, A746, A944, A1473, A1593, A2554 A2877, A3567, A4110, A4556, A5450.

The following tanks contained Phosgene: A953 and A3396.

The following tanks contained a contaminant which was not Phosgene, Chlorine, Mustards, Arsenicals, or CC. A1379, A2929, A4093, A5021, A5547, A6359, A6373.

Date Book No. BL-69 Page No. 73, 74, 75 Operator B.I. Ferber

MU-24 Supervisor H.H. Ketcham

H H Ketcham

D. Kennedy

WORKS LABORATORY RESEARCH REPORT

CONFIDENTIAL

Date June 28, 1945

949 INV.-B

Department Industrial Hygiene

Report No. AEA 107

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for T analysis, taken June 18, 1945

Source of Sample Fercleve Conditioning Lab Section

RESULTS: Sample #6: taken immediately in front of and just above the surface of the capsule bath. Analysis, 0.04 mg T/cubic meter.

Sample #7: taken just in front of Transfer Table, at table top level while one "120 capsule" was being transferred. Analysis, 0.04 mg T/cubic meter.

Sample #8: taken in center of room, approx. 5 feet from the floor. Analysis, less than 0.005 mg T/cubic meter.

Date Book No. BL-60 Page No. 69-70 Operator D. Weinberger

MU-24

#390 11-15-47 chge

Supervisor E.H. Ketcham

CONFIDENTIAL

See reverse side

Sample Sequence No.	Results	Time Received	Completed
	CLASSIFICATION CHANGED TO Unclassified By authority of W L Harwell 5/7/64 By L. G. Barnes Date 5/22/64		

Date June 21, 1945 NHK

WORKS LABORATORY SAMPLE REPORT

epartment Industrial Hygiene Report No. AEA 103

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air from CWS chlorine tanks for phosgene and chlorine analysis.
Samples taken June 19, 1945

Source of Sample Conditioning Building Section Decontamination

RESULTS: The following tanks tested negative: 297, 325, 335, 339, 340, 342, 343, 347, 348, 349, 354, 357, 359, 360, 364, 371, 372, 375, 377, 489, 493, 494, 495, 498, 502, 494, 498, 500, 502, 503, 518, 525, 531, 538, 540, 541, 543, 544, 545, 548, 555, 556, 558, 559, 560, 561, 563, 565, 628. Tank 365 contained an acid gas with reactive chlorine, but no test for either phosgene OR Cl2 gas such were obtained.

Date Book No. BL-60 Page No. 70-71 Operator D. Weinberger

MU-24 Supervisor W. H. Ketcham

Date June 21, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEH 104

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for phosgene, Cl_2, and HCl. Samples taken June 18, 1945

Source of Sample Conditioning Building Section Vacuum Pump Repair Shop.

RESULTS: The air samples were taken just a few inches above the surface of normally warm and hot flashed Arachlors as it was drained from diffusion pumps.

The air samples representing both temperature conditions tested negative for phosgene and Cl_2. In both cases traces of acid vapors were present.

The hot flashed oil fumed considerably as it was drained, and the vapors were definitely irritating to the eyes, nose and throat.

Date Book No. BL-69 Page No. 69-71 Operator B.I. Fember

MU-24 Supervisor N.H. Ketcham

Dr. Kammer

Date June 13, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene

Report No. AEA-100

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for T analysis, taken June 11, 1945

Source of Sample Fercleve Conditioning Lab. Section

RESULTS: Sample #1: Taken immediately to the right of and above the surface level of the capsule bath. Analysis, 0.8 mg T/cu. meter.

Sample #2: Taken in approximate center of the room about five feet from the floor. Analysis, 0.02 mg T/cu meter

No work involving C-616 was going on while these samples were taken.

Date Book No. BL-60 Page No. 66-67 Operator D. Weinberger

MU-24 #39 11-5-45

Supervisor N. Ketcham

See reverse side

Completed

Time Received

Results

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Marvell 5/7/64

By A. J. Barr Date 5/22/64

Sample Sequence No.

Dr. Kammer

NHK

CONFIDENTIAL

WORKS LABORATORY SAMPLE REPORT

Date June 12, 1945

1949 INV.-B

Department Industrial Hygiene

Report No. AEH 99

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for T analysis, taken June 5, 1945

Source of Sample Fercleve Conditioning Lab. Section

RESULTS: Sample #6, taken immediately to the front and right of the capsule bath. Analysis, less than 0.01 mg. T/cubic meter.
Sample #7, taken in center of room, approx. 5 feet from the floor. Analysis, less than 0.02 mg T/cubic meter.
Sample #8, taken immediately above surface of transfer table, 2 feet to the right of the operator. A "130 capsule" was being discharged. Analysis, less than 0.01 mg T/cubic meter.

Date Book No. BL-60 Page No. 64 Operator D. Weinberger

MU-24 Supervisor N.H. Ketchen

#392 71-15-47 mlp

CONFIDENTIAL

N. Pruell

See reverse side

Sample Sequence No.	Results	Time Received	Completed

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Harwell 5/7/64
By L. G. Barnes Date 5/22/64

MU-24a

Dr. Kamm...

Date June 8, 1945

WORKS LABORATORY SAMPLE REPORT

CONFIDENTIAL

Department Industrial Hygiene Report No. AEA 93

Dept. Supervisor E. Steele Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for T analysis, taken 5/23/45

Source of Sample Fercleve Conditioning Lab. Section

RESULTS: Sample #1: Taken immediately above surface of transfer table, to the right of the operator. Analysis: 0.16 mc T/cubic meter.

Sample #2: Taken immediately above the surface of the capsule bath. Analysis: 0.14 mc T/cubic meter.

Sample #3: Taken in geographical center of room approx. five feet from the floor. Analysis: 0.1 mc T/ cubic meter.

Date Book No. BL-60 Page No. 59 Operator D. Weinberger

MU-24

#393 11-15-47 Supp.

Supervisor N. Ketchan

CONFIDENTIAL

See remarks

Sample Sequence No.	Results	Time Received	Completed
	CLASSIFICATION CHANGED TO Unclassified By authority of W. L. Voorhees 5/7/64 By L. J. Berry Date 5/22/64		

MU-24a

+Dr. Kammer

Date May 31, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 95

Dept. Supervisor E. Staple Copy No. 2

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for phosgene analysis.

Source of Sample CWS Gas cylinders at Condl Bldg Section

RESULTS: Seventy cylinders were examined. Ten of these gave a strong positive test. Five others contained very minute traces, giving a characteristic but very faint test. The fifteen contaminated cylinders were marked "X" for identification purposes, as the serial numbers could not be obtained.

Date Book No. BL-60 Page No. 59 Operator D. Weinberger

MU-24 Supervisor N. Ketcham

Dr. Kammer

NHK

Date May 30, 1945

WORKS LABORATORY SAMPLE REPORT

CONFIDENTIAL

Department Industrial Hygiene | Report No. AEA 90

1949 INV.-B

Dept. Supervisor E. Staple | Copy No.

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for T analysis, taken 5/21/45

Source of Sample Fercle ve Conditioning Lab Section

RESULTS:

Sample #1: Sample taken immediately above capsule bath. Concentration 1.9 mg T/ cubic meter.

Sample #2: General Room Sample after a small capsule had "blown". Concentration, 0.5 mg T/cubic meter.

Sample #3: Sample taken approx. 4 feet behind workers at transfer table while normal transfer operations going on. Technique of operators resulted in excessive contamination of the atmosphere. Concentration 3.3 mg T/cubic meter.

Date Book No. BL-60 | Page No. 57-59 | Operator D. Weinberger

Supervisor L. Ketcham

MU-24

#3948 11-15-47 (initials)

CONFIDENTIAL

See reverse side

Completed																					
Time Received																					
Results																					
Sample Sequence No.																					

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Harwell 5/7/64
By C. G. Barr Date 5/22/64

MU-24a

Dr. Kaufmann

WORKS LABORATORY SAMPLE REPORT

CONFIDENTIAL

Date May 15, 1945

1949 INV.-B

Department Industrial Hygiene Report No. AEA 86

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed

SAMPLE Air Samples for T Analysis. Samples taken May 14, 1945

Source of Sample Percleve Conditioning Lab. Section

RESULTS: Sample #1: Taken approx. two feet above capsule bath. Found 0.32 mg T/cubic meter.

Sample #2: Taken immediately above surface of transfer table, two feet to right of operator. [redacted] One #9 capsule was discharged during sampling. Found 0.71 mg T/cu. m.

Sample #3: General room sample, taken approx three feet from the floor. Found 0.12 mg T/cubic meter.

Date Book No. BL-60 Page No. 52 Operator D. Weinberger

MU-24

#395 11-15-49 Smg

Supervisor N. Ketcham

CONFIDENTIAL

See reverse side

Completed

Time Received

Results

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Warnell 5/17/64
By C. J. Barr Date 5/22/64

Sample Sequence No.

MU-2/3

Dr Kemmer

~~CONFIDENTIAL~~

WORKS LABORATORY SAMPLE REPORT

Date May 15, 1945

1949 JUN 8

Department Industrial Hygiene

Report No. AEA-85

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air Samples for T Analysis. Samples taken May 7, 1945

Source of Sample Fercleve Conditioning Lab. Section

RESULTS: Sample #1: Taken approx. 3 feet from floor, immediately behind two men working at transfer table. Found 0.29 mg T/cu. m.

Sample #2: Taken immediately to right of capsule bath after a #9 capsule had "blown" in the water. Found 0.5? mg T/cu. m.

Sample #3: General room sample taken four feet from floor. Found 0.13 mg T/cu. meter.

Date Book No. B1-60 Page No. 4?-49 Operator D. Weinberger

MU-24

Supervisor N. Ketcham

#396 11-15-57 JMC

~~CONFIDENTIAL~~

NPrice

See reverse side

Sample Sequence No.	Results	Time Received	Completed

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Harwell 5/7/64

By W. G. Lowry Date 5-22-64

WORKS LABORATORY SAMPLE REPORT

Date May 1, 1945

Department Industrial Hygiene

Report No. AEA 75

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for Phosgene analysis. (Second group of 21 tanks)

Source of Sample CWS tanks at FB&D Section

RESULTS: Positive test obtained on tank number 10 (serial # A3169).

Negative test obtained on the other twenty tanks.

Date Book No. Page No. Operator D. Weinberger

MU-24

Supervisor H. Ketchum

H. Ketchum

Date April 27, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 74

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for Phosgene analysis. (First group of 14 tanks)

Source of Sample CWS tanks at FB&D. Section

RESULTS: Positive test obtained on tanks number 1 and number 8.

Negative test obtained on tanks number 2,3,4,5,6,7,9,10,11,12, 13, and 14.

Date Book No. ----- Page No. --- Operator D. Weinberger

MU-24 Supervisor N. Ketcham

Dr. Rammer

NHK

Date May 7, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 81

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air sample for Trichlorethylene analysis

Source of Sample FB&D Deagreasing Chamber. Section

RESULTS: Positions 2 and 3, occasional traces of 100 ppm

Positions 1N and 1S, 4 and 5, negative.

The following were degreased during our sampling: One 12' pipe 12" in diameter. One tray of small articles. One flange cover 2' in diameter.

Date Book No. ----- Page No. ----- Operator D. Weinberger

MU-24 Supervisor N. Ketcham

N. Ketcham

Date 5-1-45

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. AEA 78

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air for degreaser vapor		5-1-45	- 5-1-45

Source of Sample F.B.&D. Degreaser Pit. Section

RESULTS: Posttions 3 and 5 : Occasional traces 100 ppm.

Other positions were negative.

Note : Positions referred to are the same as used for the regular degreaser reports.

Date Book No. ——— Page No. ——— Operator D.Weinberger

MU-24 Supervisor N.H.Ketcham

Date 5-1-45

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. ATA 76

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air for Trichlorethylene vapor	5-1-45	5-1-45	

Source of Sample F.B.&D. Degreaser Section

RESULTS: All positions were negative. The degreaser bath contained one 12' pipe 1' in diam. during the sampling.

Date Book No. Page No. Operator D.Weinberger

MU-24 Supervisor N.H. Ketcham

Dr. Kammer

NHK

Date April 30, 1945

WORKS LABORATORY SAMPLE REPORT

CONFIDENTIAL

1945 INV.-B

Department Industrial Hygiene Report No. AEA 77

Dept. Supervisor E. Stale Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air sample for T analysis

Source of Sample Fercleve Conditioning Lab. Section

RESULTS: Sample #1 was taken immediately above the surface of the transfer table about three feet to the right of the operator while one [redacted] small [redacted] capsule was discharged. Analysis: 0.12 mc T/cu.meter.

Sample #2 was taken in the center of the laboratory, as a general room sample. Analysis: 0.22 mc T/ cu. meter.

Date Book No. BL-60 Page No. 47-48 Operator D. Weinberger

MU-24

#3977 11-15-47 Ohlm

Supervisor N. Ketcham

CONFIDENTIAL

See reverse side

Sample Sequence No.	Results	Time Received	Completed
	[redacted]		
	[redacted]		

CLASSIFICATION CHANGED TO Unclassified
By authority of W. J. Nameck 5/7/69
By C. J. Bair Date 5-7-69

MU-24a

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WORKS LABORATORY REPORT

Date April 19, 1945

Department Industrial Hygiene Report No. FDA 71

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed

SAMPLE Air samples for T analysis. Samples taken April 14, 1945

Source of Sample Fercleve Conditioning Lab. Section

RESULTS:

#1 Sample taken immediately above surface of Transfer Table, to the right of two operators while three "120 capsules" were discharged into material container. Concentration: 0.9 milligrams T/ cubic meter.

#2 Sample taken at face level immediately to right of worker at salvage table. Concentration 0.04 milligrams T/cubic meter.

Date Book No. BL-60 Page No. 39-40 Operator D. Weinberger

MU-24

#398 Bone 11-15-49

Supervisor H. Ketchan

CONFIDENTIAL

See reverse side

Completed

Time Received

Results

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Warwell 5/7/69
By [illegible] Date 5/22/69

Sample Sequence No.

MU-24a

~~CONFIDENTIAL~~
~~WORKS LABORATORY SAMPLE REPORT~~

Date April 19, 1945

1949 INV.-B

Department Industrial Hygiene

Report No. FDA- 70

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for T analysis. Samples taken April 14, 1945

Source of Sample Fercleve Conditioning Lab Section

RESULTS:

#1 Sample taken just above surface of Transfer Table while operator unplugged material container and transferred material from one "120 capsule" to material container. Concentration: 0.7 Milligrams T/ Cubic meter.

#2 Sample taken for a three minute period immediately following a "blow" resulting from failure of valve on material container. Air sampled three feet from floor and ten feet from the faulty valve. Concentration: 22.1 milligrams T/ cubic meter.

Date Book No. BL-60 Page No. 39-40 Operator D. Weinberger

MU-24

Supervisor K. Ketcham

See reverse side

4399 11-15-47 Smw

CONFIDENTIAL

Sample Sequence No.	Results	Time Received	Completed
	CLASSIFICATION CHANGED TO Unclassified By authority of W.L. Marshall 5/7/64 By C.J. Koning Date 5/20/64		

MU-24a

~~CONFIDENTIAL~~ 10

WORKS LABORATORY SAMPLE REPORT

Date April 18, 1945

Department Industrial Hygiene Report No. FDA-69

Dept. Supervisor E. S taple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air sample for T analysis. Sample taken April 9, 1945

Source of Sample Fercleve Conditioning Lab. Section

RESULTS: Sample taken at face level between two men working at Transfer Table. Concentration: 0.006 milligrams T/ cubic meter

CLASSIFICATION CHANGED TO Unclassified
~~By authority of~~ W. L. Harwell 5/7/64

By [illegible] Date 5/7/64

Date Book No. B L-60 Page No. 37-38 Operator D. W einberger

MU-24

#4100 11-15-47 Mgm

Supervisor N. Ketcham

~~CONFIDENTIAL~~

Dr. Kamm

~~CONFIDENTIAL~~

4D

~~WORKS LABORATORY~~ SAMPLE REPORT

Date April 5, 1945

1949 INV.-B

Department Industrial Hygiene

Report No. FDA 63

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air sample for T analysis

Source of Sample Fercleve Conditioning Lab. Section

RESULTS: Sample taken at face level between two men working at transfer table. Two "120 capsules" were transferred to "material container" while sample was being taken.

Concentration: 2.0 micrograms T/cu. meter.

Date Book No. BL-60 Page No. 35 Operator D. Weinberger

MU-24

#401 11-15-44

Supervisor N. Ketcham

See reverse side

Sample Sequence No.	Results	Time Received	Completed

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Harrell 5/7/46
By L. J. Lamm Date 5/22/46

MU-24a

~~CONFIDENTIAL~~ 18

~~WORKS LABORATORY SAMPLE REPORT~~

Date April 5, 1945

1949 INV.-5

Department Industrial Hygiene

Report No. FDH 62

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air sample for T analysis

Source of Sample Fercleve Conditioning Lab. Section

RESULTS: Sample taken just above table top at north end of transfer table. Two "120 capsules" were transferred to "material container" while sample was being taken.

Concentration: 40 micrograms T/ cu. meter.

Date Book No. BL-60 Page No. 35 Operator D. Weinberger

MU-24

Supervisor N. Ketcham

See remarks sheet

Sample Sequence No.	Results	Time Received	Completed

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Marshall 5/7/64
By C. G. Barr Date 5/22/64

MU-24a

Dr. Rammel

CONFIDENTIAL 1 p.

~~WORKS LABORATORY SAMPLE REPORT~~

Date March 28, 1945 1949 INV.-B

Department Industrial Hygiene

Report No. FDA 59

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air sample for T analysis. Sample taken 3-17-45

Source of Sample Fercleve Conditioning Lab. Section

RESULTS: Sample taken at face level immediately behind two men working at transfer table. During the 10 minutes of sampling one "120 capsule" was [redacted] discharged into a "material container". Doors were open near table, giving good natural ventilation.

T concentration: 847 micrograms/cu. meter.

Date Book No. BL-19 Page No. 33 Operator D. Weinberger

MU-24

#403 11-15-49

CONFIDENTIAL

Supervisor N. Ketcham

Completed

Time Received

Results

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Harwell 5/7/64

By C. J. Barning Date 5/29/64

Sample Sequence No.

MU-24a

Dr. Kammer

CONFIDENTIAL

WORKS LABORATORY SAMPLE REPORT

Date March 28, 1945

1949 INV.-B

Department Industrial Hygiene

Report No. FDA 58

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air sample for T analysis. Sample taken 3-10-45.

Source of Sample Fercleve Conditioning Lab. Section

RESULTS: Sample taken in middle [redacted] of conditioning room at face level.

All doors were open, giving good natural ventilation.

T concentration: 18 micrograms/ cu. meter.

CLASSIFICATION CHANGED TO Unclassified

By authority of W. L. Harnell 5/7/64

By L. J. Berning Date 5/22/64

Date Book No. BL-60 Page No. 27 Operator D. Weinberger

MU-24

Supervisor N. Ketcham

#40 11-15-44

CONFIDENTIAL

Dr. Kamick

CONFIDENTIAL

WORKS LABORATORY SAMPLE REPORT

Date March 17, 1945

Department Industrial Hygiene

Report No. FDA 56

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air sample for T analysis taken 3-10-45

Source of Sample Fercleve conditioning lab Section

RESULTS: 1.6 cu. ft. air taken thru Midget Impinger. Sample taken at face level just outside stone hood while operator flamed out three "material lines" and two "120 capsules".

Concentration T: 88 micrograms/cu. meter.

Visible [redacted] clouds escaped periodically from the hood.

Date Book No. ~~BL 60~~ Page No. 26 Operator D. Weinberger

MU-24

CONFIDENTIAL

Supervisor N. Ketcham

See [illegible]

Sample Sequence No.	Results	Time Received	Completed

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Kanne 5/2/64
By [illegible] Date 5/22/64

MU-24a

Dr. Kammer

~~CONFIDENTIAL~~

Date March 10, 1945

~~WORKS LABORATORY SAMPLE REPORT~~

Department Industrial Hygiene Report No. FDA 54

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air samples for T analysis. Samples taken 3/2/45

Source of Sample Fercleve Conditioning Lab Section

RESULTS: In middle of room at face level while normal work going on; 35 micrograms T / cu. meter

Just outside of wooden hood at face level between shifts while no work going on; 9 micrograms T / cu. meter

Date Book No. BL-60 Page No. 25 Operator D. Weinberger

MU-24

Supervisor N. Ketcham

~~CONFIDENTIAL~~

Thomas F. Peet

See reverse side

Sample Sequence No.	Results	Time Received	Completed
	CLASSIFICATION CHANGED TO Unclassified By authority of W. L. Marvell 5/2/64 By C. J. Borkowski Date 5/25/64		

Dr. Kamen

CONFIDENTIAL

Date 2-17-45

1949 INV. B

~~WORKS LABORATORY SAMPLE REPORT~~

Department Technical Control

Report No. FDA 42

Dept. Supervisor E. Staple

Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air for T, from hood of Conditioning Shop

Source of Sample Fercleve Section

RESULTS: aproximately 0.6 mg/cu.m. (volume collected 1.5cu.ft.)

CLASSIFICATION CHANGED TO Unclassified

By authority of W. L. Harnell 5/7/64

By [illegible] Date 5/22/64

Date Book No. BL59 Page No. 19 Operator A. Kleinsteuber

MU-24

Supervisor E. Grilly

CONFIDENTIAL

Log # 44-51-11

Dr. Kaucher

1949 INV-B

Date 2-10-45

WORKS ~~LABORATORY~~ CONFIDENTIAL REPORT

Department Technical Control Report No. FDA 33

Dept. Supervisor Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Analysis of Air for T

Source of Sample Fercleve Section Safety Department

RESULTS: Over

CLASSIFICATION CHANGED TO Unclassified
By authority of W. L. Harnell 5/7/64

By C. J. Baring Date 5/22/64

Date Book No. BL-59 Page No. 16 Operator A.T.Kleinsteuber

MU-24 #608 11-15-47 mlp

Supervisor E. Grilly

CONFIDENTIAL

Sample Sequence No.	Results	Time Received	Completed
For significance of sample no. see ~~last line of sheet~~ below			
1	0 mg T/cu.m.	2-9-45	2-9-45

This sample was taken by LeFevre of Fercleve Safety Dept. on 1/15/45 in the Conditioning Shop during a capsule transfer, ran 5 minutes.

CONFIDENTIAL

Date 2-10-45

WORK SHEET AND FINAL REPORT

Department Technical ~~Control~~ Report No. FDA 32

Dept. Supervisor Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Analysis of Air for T

Source of Sample Fercleve Section Safety Department

RESULTS: over

CLASSIFICATION CHANGED TO Unclassified
Authority of W. L. Harrell 5/7/64

By L. G. Berry Date 5/23/64

Date Book No. BL-59 Page No. 16 Operator A. T. Kleinsteuber

MU-24 #409 11-15-47

Supervisor E. Grilly

CONFIDENTIAL

Sample Sequence No.	Results	Time Received	Completed
For significance of Sample No. see attached sheet			
Bottle 2	.08 mg T/cu.m. Ø	2-9-45	2-9-45
" 4	0.12 mg T/cu.m.		
" 5	0.02 mg T/cu.m.		
" 6	0 mg T/cu.m.		

Dr. Kammer

CONFIDENTIAL

HP Confidential

1949 INV.-D

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA - 20

Department Supervisor E. Staple Copy No.

	Description	Sequence No.	Date Rec'd.	Date Finished
SAMPLE	Air at S-50		1-27-45	1-27-45

RESULTS See Attached Data Sheet

Date Reported 1-29-45 Operator D. Weinberger

Data Book No. BL-59 Page No. 13 Supervisor E. R. Grilly

REMARKS:

~~CLASSIFICATION CHANGED TO~~ Unclassified
By authority of W. L. Harwell 5/7/64
By C. J. Boring Date 5/22/64

Work Requested and Reasons for Submission of Sample: Requested by Dr. Kammer, Medical Department.

Date Submitted: Sampled ~~Submitted~~ By: Laboratory Staff

Source of Sample S-50

SAMPLE HISTORY

410 11-15-47

Inv. 10/1/46 L. J.

M-359

CONFIDENTIAL

AIR SAMPLES TAKEN AT S-50 1-27-45

	Sample Point	Results	Remarks
1.	General Area in Material Near Hood (which was not working) and near corrosion bath.)	0.4 mg. T/cu. meter	Taken at 10:00 A.M.
2.	No. 1 Transfer Room	Less than 0.02 mg. T/cu. meter	Taken at 10:30 A.M. There had been a break. A pungent odor was observed.
3.	M.S. Assay Machine Room	0.4 mg. T/cu. meter	Taken at 1:00 P.M. While tubes were changed on machines.
4.	Refining Room	0.2 mg. T/cu. meter	Taken at 1:15 P.M. in hood while sample tube was being tested.
5.	Refining Room	Less than 0.04 mg. T/cu. meter	Taken at 1:30 P.M. while sample tube was being attached to test apparatus.
6.	M.S. Assay Room	Less than 50 p.p.m. trichlorethylene	Various points throughout the room.

Conditions Under Which Air Samples Were Taken at Fercleve

on February 9, 1945

(NOTE: "Bottle" refers to midget impinger sample bottle and "tube" refers to electrostatic dust precipitator steel tube.)

1. Bottle # 2, tube # 143

Location: Wooden hood in Conditioning Room.
Operation: Heating sample tubes to drive out 616.
Appearance: Clouds came out of sample tubes sporadically.
Ventilation: Hood had a slight draft.
Time: 18 minutes.

2. Bottle # 4, tube # 137

Location: Stone hood in Conditioning Room.
Operation: Cleaning out sample tube ends by heating.
Appearance: Heavy clouds most of the time, occasionally so heavy operator closed hood door and waited.
Ventilation: Hood had slight draft. There was a leak where the hood floor met the back wall, through which clouds came out and around front.
Time: 10 minutes

3.

3. Bottle # 5, tube # 184

Location: M.S. Assay Room at transfer apparatus.
Operation: Transfer of 616 from small tube to large tube with valve.
Appearance: occasional wisps of vapor momentarily when flange nuts taken off. (Air sample may be high in T because of accidental heating of nut before it was tightened.)
Ventilation: excellent room ventilation.
Time: 20 minutes.

4. Bottle # 6, tube # 144

Location: M. S. Assay Room at transfer apparatus
Other Details: Same as 3 above (Bottle # 5, tube # 184) except no accidental heating.
Time: 18 minutes.

5. Bottle # 3

Location: Hood in Conditioning Room where tubes treated with 216.
Operation: Evacuated tubes, admit 216, disconnections.
Ventilation: fair
Time: 11 minutes.

11-15-47

WORKS LABORATORY SAMPLE REPORT

Department Technical C ntrol **Report No.** 14

Department Supervisor E. Staple **Copy No.** 1

	Description	Sequence No.	Date Received	Date Finished
SAMPLE	Trichlorethylene Vapor near Degreasing Tank # 1		8/21/44	8/21/44

RESULTS Samples taken at the edge of the Degreasing Tank with the Frigidaire-Freon 12 Leak Tester indicated a general average concentration of 100-200 ppm. tricholorethylene. In the vicinity of the trichlorethylene still near the degreaser, the concentration was 200 ppm periodically. Concentrations of trichlorethylene increased to 200 ppm. near the tank edge when pipe was newly suspended in the Degreaser and also when the liquid trichlorethylene spray was in use.

Date Reported 8/21/44 **Operator**

Data Book No. **Page No.** **Supervisor** E. Staple

REMARKS: Small air vents in the distillate line from the still as well as other possible leaks in the still may be responsible for the higher concentration of trichlorethylene in air near the still. The raising of the dondensate level by introduction of material into the degreaser and spray from the liquid trichlorethylene spray may possibly cause the respective increases in concentration noted above.

Work Requested and Reasons for Submission of Sample: A check of the concentration of trichlorethylene in air in the vicinity of the degreasing unit at the building 1401 to determine whether a hazard exists for working personnel in the vicinity of the degreaser unit.

Date Submitted: **Submitted By:**

Source of Sample

SAMPLE HISTORY

Date April 19, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. FDA 72

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		4-19-45	4-19-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1N: Occasional traces - 100 ppm.

Positions 1S, 2, 3, 4, & 5 were negative.

Two 8' lengths of 1'dian. pipe were taken out of degreaser at time of test, sample at pos. 1N being taken at this time.

Date Book No. —— Page No. —— Operator D. Weinberger

MU-24 Supervisor H. Ketcham

MHK

Date April 16, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. FDA 68

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		4-16-45	4-16-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1N: Constant indication 100 ppm. Position 3: Constant indication 200-300 ppm. Positions 1S, 2, 4, & 5 were negative. The vat ~~was~~ contained no pieces to be degreased while ~~the~~ the sampling was going on.

Date Book No. —— Page No. —— Operator D. Weinberger

MU-24 Supervisor N. Ketcham

N. Ketcham

UHK

Date April 10, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. FDH 66

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		4-10-45	4-10-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1S : Frequent traces 100-200 ppm. during withdrawal of 12 4" d. pipe -2-3' long. Negative results in positions 1N, 2, 3, 4, & 5. 3 12' lengths of 3" D. monel piping were also washed during sampling.

Date Book No. —— Page No. —— Operator D.Weinberger

MU-24 Supervisor N. Ketcham

Dr. Kammer

N.K.K

Date April 2,1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. EDA 61

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		4-2-45	4-2445

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1N : Const. indication - 100-500 ppm. Pos. 3 : Constant indic. - 100-200 ppm. Positions 1S, 2, 4, 5, : Negative

Pos. 3 was taken after withdraw. of coiled pipe (1"). Pos. 1N was taken during degreasing of a basket of small pipes.

NOTE : Dividing pos. 1 into N & S- the N side being nearest the back wall

Date Book No. —— Page No. —— Operator D.Weinberger

MU-24 Supervisor N. Ketcham

Dr. Rammer

Date March 29, 1945

WORKS LABORATORY SAMPLE REPORT

Department Industrial Hygiene Report No. FDA 60

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		3-29-45	3-29-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : —

Position 2 : Occasional traces 100 ppm.

Positiom 3 : Constant indication 100-200 ppm.

Position 4 : —

Position 5 : —

Date Book No. — Page No. — Operator D. Weinberger

MU-24 Supervisor N. Ketcham

Dr. Rheinner

Date Mar. 27, 1945

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. EDA 57

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		3-27-45	3-27-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : —

Position 2 : —

Position 3 : ~~100~~ Occasional traces 100 ppm.

Position 4 : —

POsition 5 : —

Date Book No. — Page No. — Operator D.Weinberger

MU-24 Supervisor N. Ketcham.

Dr. Kummer

WORKS LABORATORY

Date March 12, 1945

Department Industrial Hygiene — Report No. FDA 55

Dept. Supervisor E. Staple — Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		3-12-45	3-12-45

Source of Sample F.B.&D. Degreaser — Section

RESULTS:

Position 1 : Constant Indication ✓	500 ppm.
Position 2 : Occasional Traces	100 ppm.
Position 3 : Occasional traces	100 ppm.
Position 4 : ——	
Position 5 : ——	

Date Book No. —— Page No. —— Operator D.Weinberger

MU-24 Supervisor N. Ketcham.

Homer F. Bunt

Dr. Kammer

Date March 5, 1945

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 53

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air 3-5-45 - 3-5-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : ——

Position 2 : ——

Position 3 : Frequent traces (during pipe withdrawal)-100-300ppm.

Position 4 : ——

Position 5 : ——

Date Book No. —— Page No. —— Operator D.Weinberger

MU-24 Supervisor N. Ketchum

Dr. Kammer

Date 3-1-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 52

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		3-1-45	3-1-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : ——

Position 2 : ——

Position 3 : Frequent traces 100 ppm.

Position 4 : ——

Position 5 : Occasional traces 100 ppm.

Date Book No. —— Page No. —— Operator D. Weinberger

MU-24 Supervisor N. Ketcham

Dr. Kammer
Trichlorethylene file
1A

Date 2-28-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 51

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		2-28-45	2-28-45

Source of Sample F.B.&D. Degreaser Section

RESULTS:

Position 1 : ——

Position 2 : ——

Position 3 : Frequent traces 100 ppm.
Constant indication 400-500 ppm. during withdrawal of pipe

Position 4 : ——

Position 5 : Frequent traces 100-200 ppm.

Date Book No. —— Page No. —— Operator D.Weinberger

MU-24 Supervisor N. Ketcham

Date 2-27-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 50

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air 2-27-45 - 2-27-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : ——

Position 2 : ——

Position 3 : Occasional Traces 100 ppm.

Position 4 : ——

Position 5 : Occasional traces 100 ppm.

Date Book No. —— Page No. —— Operator D.Weinberger

MU-24 Supervisor N. Ketcham

Date 2-26-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control | Report No. FDA 49

Dept. Supervisor E. Staple | Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		2-26-45	2-26-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : Occasional traces 100 ppm. ✓

Position 2 : ——

Position 3 : Occasional traces 100 ppm.

Position 4 : ——

Position 5 : ——

Date Book No. —— Page No. —— Operator D.Weinberger

MU-24 Supervisor N. Ketcham

Date 2-24-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. HDA 48

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air 2-24-45 - 2-24-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : Frequent traces 100-500 ppm. ✓

Position 2 : ——

Position 3 : ——

Position 4 : ——

Position 5 : Frequent traces 100-200 ppm.

Date Book No. —— Page No. —— Operator D.Weinberger

MU-24 Supervisor N. Ketcham

Date 2-23-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 47

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air 2-23-45 - 2-23-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : —— ✓

Position 2 : ——

Position 3 : ——

Position 4: ——

Position 5 : ——

Date Book No. —— Page No. —— Operator D. Weinberger

MU-24 Supervisor N. Ketcham

Date 2-22-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 46

Dept. Supervisor E.Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		2-22-45	-2-22-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : ——

Position 2 : ——

Position 3 : Occasional traces 100 ppm.

Position 4 : ——

Position 5 : ——

Date Book No. —— Page No. —— Operator D.Weinberger

MU-24 Supervisor N. Ketcham

Dr. Kamm's

File TRICHLORETHYLENE FILE

Date 2-21-45

WORKS LABORATORY SAMPLE REPORT

Department Technucal Control Report No. FDA 45

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air 2-21-45 - 2-21-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : Occasional traces 100-200 ppM. ✓

Position 2 : ——

Position 3 : Occasional traces 100 ppM.

Position 4 : ——

Position 5 : Frequent traces 200 ppM.

Date Book No. —— Page No. —— Operator D.Weinberger

MU-24 Supervisor N. Ketcham

Dr. Kammer

Date 2-20-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 44

Dept. Supervisor E Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air 2-20-45 - 2-20-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : Occasional traces 100 ppM.

Position 2 : ——

Position 3 : Frequent traces 100 ppM.

Position 4 : ——

Position 5 : ——

Date Book No. —— Page No. —— Operator D.Weinberger

MU-24 Supervisor N. Ketcham

Dr. Kennedy

10

Date 2-19-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 43

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air 2-19-45 - 2-19-45

Source of Sample F.B.& D. Degreaser Section

RESULTS: Posiion 1 : Constant indication 1000400 ppM. ✓

Position 2 : ——

Position 3 : Occasional traces 100 ppM.

Position 4 : ——

Position 5 : Occasional traces 100--200 ppM.

Date Book No. -- Page No. —— Operator D.Weinberger

MU-24 Supervisor E.R. Grilly

Dr. Kammer

Date 2-17-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 41

Dept. Supervisor E.Staple Copy No. 4

Description Sequence No. Time Received Time Completed

SAMPLE Air 2-17-45 - 2-17-45

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : Occasional traces 100 ppM. ✓

Position 2 : Frequent traces 100-200 ppM.

Position 3 : Occasional traces 100-200 ppM.

Position 4 : ——

Position 5 : ——

Date Book No. — Page No. — Operator D.Weinberger

MU-24 Supervisor E.R. Grilly

Dr. Kammer

Date 2-16-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 40

Dept. Supervisor E.STaple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		2-16-45	2-16-45

Source of Sample F.R.&D. Degreaser Section

RESULTS: Position 1 : —

Position 2 : Occasional traces 100 ppM.

Position 3 : Frequent traces 100 ppM.

Position 4 : —

Position 5 : —

Date Book No. — Page No. — Operator D.Weinberger

MU-24 Supervisor E.R. Grilly

Dr. Kammer

Date 2-15-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 39

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air 2-15-45 - 2-15-45

Source of Sample F.R.&D. Degreaser Section

RESULTS: Position 1 : —

Position 2 : Frequent traces 100-500 ppM.

Position 3 : Occasional traces 100-200 ppM.

Psoition 4 : —

Position 5 : Occasional traces 100 ppM.

Date Book No. — Page No. — Operator D.Weinberger

MU-24 Supervisor E.R. Grilly

Dr. Kammer

Date 2-14-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 38

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		2-14-45	2-14-45

Source of Sample F.B.&D. Degreaser Section

RESULTS:

Position 1:	—	
Position 2 :	—	
Position 3 :	Occasional traces	100-200 ppM.
Position 4 :	Occasional traces	100 ppM.
Position 5 :	Frequent traces	100 ppM.

Date Book No. — Page No. — Operator D. Weinberger

MU-24 Supervisor E.R. Grilly

Dr. Rammler

10

Date 2-13-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 37

Dept. Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		2-13-45	2-13-45

Source of Sample F.B.&D. Degreaser Section

RESULTS:

Position 1 :	Constant Indication	100-500 ppM. ✓
Position 2 :	Occasional traces	100 ppM.
Position 3 :	Frequent traces	100-200 ppM.
Position 4 :	—	
Position 5 :	(Frequent traces	100-200 ppM.
	(Const. indic. of more than 500 PPM. for 2 min.	

Date Book No. — Page No. — Operator D.Weinberger

MU-24 Supervisor E.R.Grilly

Dr. Hammer

Date 2-12-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 36

Dept. Supervisor E.Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air 2-12-45 - 2-12-45

Source of Sample F .B.&D. Degreaser Section

RESULTS: Position 1 : Occasional traces 100-200 ppM. ✓

Position 2 : —

Position 3 : Occasional traces 100 ppM.

Position 4: Occasional traces 100 ppM.

Position 5 : Occasional traces 100 ppM.

Date Book No. — Page No. — Operator D.Weinberger

MU-24 Supervisor E.R. Grilly

Dr. Kammer

Date 2-10-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 35

Dept. Supervisor E.Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air 2-10-45 - 2-10445

Source of Sample F.B.&D. Degreaser Section

RESULTS: Position 1 : Frequent traces 100 ppM.

Position 2 : —

Position 3 : Frequent traces -100-200 ppM. Constant indication of 200-300 ppM. when object was removed from vat

Position 4 : —

Position 5 : Occasional traces - 100 ppM.

Date Book No. — Page No. — Operator D.Weinberger

MU-24 Supervisor E.R.Grilly

CONFIDENTIAL

Date 2-10-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control | Report No. FDA 34

Dept. Supervisor E. Staple | Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air-1.1 cu.ft 2-9-45 - 2-10-45

Source of Sample Fercleve conditioning rm. Section

RESULTS: (See back)

Date Book No. BL 60 Page No. 18 Operator D. Weinberger

MU-24 Supervisor E.R. Grilly

CONFIDENTIAL

Sample Sequence No.	Results	Time Received	Completed
	1.32 mg. F / cu. meter	2-9-45	2-10-45

DECLASSIFIED

by authority of: [illegible] 5/4/95

(Authorized declassifier's name and organization)

(Official declass. notice number, TIC notice, etc.) 5/11/95

(Verifying class.) 5/11/95

Dr. Kamm

Date 2-9-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 31

Dept. Supervisor E Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		2-9-45	2-9-45 4 P.M.

Source of Sample F.B.&D. Degreaser Section

RESULTS: Found frequent traces of degreaser vapor in position 3 in a concentraion varying from 100-300 ppM.

Date Book No. -- Page No. -- Operator D. Weinberger

MU-24 Supervisor E.R.Grilly

D... K...

18 Date 2-8-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 30

Dept. Supervisor E. Staple Copy No. 1

Description Sequence No. Time Received Time Completed

SAMPLE Air 2-8-45 - 2-8-45

Source of Sample F.B. & D. Degreaser Section

RESULTS: Observed constant indication of degreaser vapor in position 1 ~~M~~ in the conc. of 100 ppm. Found frequent traces in positions 3 & 5 varying in conc. from 100-200 ppm. Found occasional traces in positions 2 & 4 in the conc. of 100 ppm.

Date Book No. -- Page No. -- Operator D.Weinberger

MU-24 Supervisor E.R. Grilly

Dr. Ramsey

HP

Date 2-7-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 29

Dept. Supervisor E Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air	2-7-45	---2-7-45	3:15 P.M.

Source of Sample F.B. & D. Degreaser Section

RESULTS: Observed constant indication of degreaser vapor in position 5 varying in conc. from 100-200 ppm. Also found traces of vapor in position 1 varying from 100-200 ppm.

Date Book No. -- Page No. -- Operator D. Weinberger

MU-24

Supervisor E.R. Grilly

Dr. Rammler

Date 2/6/45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 28

Dept. Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		2-6-45	2-6-45 4:00 PM

Source of Sample F. B. and D. Degreaser Section

RESULTS: Observed traces of degreaser vapor in positions 2 and 5 in the concentration of 100 ppm. Also found traces in position 3 varying in concentration from 100 - 200 ppm.

Date Book No. , Page No. Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr. Rammler

Date Feb. 5, 1945

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 27

Dept. Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		2-5-45	2-5-45

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed traces of degreaser vapor in position 3 varying in consentration from 100 200 p.p.m.

Date Book No. Page No. Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr. Kammer

Date Feb. 3, 1945

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 26

Dept. Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		2-3-45	2-3-45 3:15 P.M.

Source of Sample F. B. & D. Degreser Section

RESULTS: Observed slight traces of degreaser vapor in positions 2 and 5 in the concentration of 100 p.p.m. Also found steady indication in position 3 varying form 100 to 200 p.p.m.

Date Book No. -- Page No. -- Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr. Rauscher

Date 2-2-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 25

Dept. Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		2-2-45	2-2-45 2:15 PM

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed traces of degreaser vapor in positions 1, 3, and 5 in a concentrations of 100 p.p.m.

Date Book No. Page No. Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr. Kammer

Date 2-1-45

WORKS LABORATORY SAMPLE REPORT

Department Technical Control Report No. FDA 24

Dept. Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air	2-1-45	2-1-45	3:45 P.M.

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed slight traces of degreaser vapor in positions 1, 2, and 3 in a concentration of 100 ppm.

Date Book No. Page No. Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr. Kammer

WORKS LABORATORY SAMPLE REPORT Date 1-31-45

Department Technical Control Report No. - FDA 23

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-31-45	1-31-45 3:15 pm

Source of Sample F, B, & D Degreaser Section

RESULTS: Observed traces of degreaser vapor in positions 3 and 5 in concentration of 100 ppm. There was a steady indication of vapor in position 2 varying from 100 to 200 ppm.

Date Book No. — Page No. -- Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr. Rammer

WORKS LABORATORY SAMPLE REPORT Date 1-30-45

Department Technical Control Report No. - FDA 22

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1030-45	1-30-45

Source of Sample F, B & D degreaser Section

RESULTS: Obxerved slight traces of degreaser vapor in positions 1 and 3 in the concentration of 100 p.p.m. Vapor also appeared in position 4 in the concentration of 100 p. p. m.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

D Kammer

WORKS LABORATORY SAMPLE REPORT Date 1-29-45

Department Technical Control Report No. - FDA 21

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-29-45	1-29-45 3:15 PM

Source of Sample F, B & D Degreaser Section

RESULTS: Found constant indication of degreaser vapor in position 1 in the conc. of 100 - 500 ppm. There were slight traces in position 2 - about 100 ppm. Positions 3 and 5 gave occasional indications varying in concentration from 100 - 200 ppm.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 1-27-45

Department Technical Control Report No. FDA 19

Dept. Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-27-45	1-27-45 4:00 PM

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed traces of degreaser vapor in positions 1 and 5 and 3 in the concentration of 100 p. p. m.

Date Book No. Page No. Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr. Kammer

18

WORKS LABORATORY SAMPLE REPORT Date January 26, 1945

Department Technical Control Report No. - FDA 18

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-26-45	1-26-45 3:30 P.M.

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed traces of degreaser vapor in positions 1 and 3 in concentration of 100 p.p.m. Vapor appeared in position 2 continuously varying in concentrations from 100-200 p.p.m.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr. Kammer

WORKS LABORATORY SAMPLE REPORT

Date 1-25-45

Department Technical Control

Report No. - FDA 16

pt. Supervisor E. Staple

Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-25-45	1-25-45 4:00 P.M.

Source of Sample F. B. & D. Degreaser Section

RESULTS: No traces of degreaser vapor observed today.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr Kamerer

WORKS LABORATORY SAMPLE REPORT Date 1-24-45

Department Technical Control Report No. - FDA 15

pt.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-24-45	1-24-45 3:45 P.M.

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed traces of degreaser vapor in position 5 in the concentration of 100 p.p.m.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr. Kammer

WORKS LABORATORY SAMPLE REPORT Date 1-23-45

Department Technical Control Report No. - FDA 14

ept.Supervisor E. Staple Copy No.

	Description	Sequence No.	Time Received	Time Completed
SAMPLE	Air		1-23-45	1-23-45 4:00 P.M.

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed traces of degreaser vapor in positions 1 and 3 in concentrations of 100 p.p.m. Also observed degreaser vapor in position 2, varying in concentration from 100-200 p.p.m.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr Kammer

X X

WORKS LABORATORY SAMPLE REPORT Date 1-22-45

Department Technical Control Report No. - FDA 13

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-22-45	1-22-45 4:00 P.M.

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed traces of degreaser vapor in positions 3 and 5 in the concentration of 100 p.p.m. Also found traces in position 1 varying in concentration from 100 - 500 p.p.m.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 1-20-45

Department Technical Control Report No. - FDA 12

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-20-45	1-20-45 2:45 P.M.

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed traces of degreaser vapor in positions 3 and 5 in the concentration of 100 p.p.m. At position 1, during one 5-minute period, found concentration of 500 p.p.m. This gradually decreased to a 100 p.p.m. value.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr Laumier

WORKS LABORATORY SAMPLE REPORT Date 1-19-45

Department Technical Control Report No. FDA 11

ept.Supervisor E. Staple Copy No. /

	Description	Sequence No.	Time Received	Time Completed
SAMPLE	Air	1-19-45		

Source of Sample S-50 nickel shop Section

RESULTS: Hood when tube cleaned: 0.4 mg. T/ cu. m.

Hood when tubes bled with 216: 2 mg. F/ cu. m.

Date Book No. - Page No. - Operator E. R. Grilly

MU-24 Supervisor E. R. Grilly

CONFIDENTIAL

DECLASSIFIED

By authority of: RW Selby 5/9/95 K25 Site
(Authorized Declassifier's name and organization)

(Official declass. notice memo, TIC notice, etc.) 5/11/95

(Person making change) 5/11/95

MU-24a

Sample Sequence No.	Results	Time Received	Completed

Dr. Kemmer

X X

WORKS LABORATORY SAMPLE REPORT Date 1-19-45

Department Technical Control Report No. FDA 10

Dept. Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-19-45	1-19-45 4:00 P.M.

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed traces of degreaser vapor in positions 1 and 5 in the concentration of 100 p.p.m.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

D. Kaufman

WORKS LABORATORY SAMPLE REPORT Date 1-18-45

Department Technical Control Report No. FDA 9

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-18-45	1-18-45 3:45 P.M.

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed traces of degreaser vapor in positions 1, 2 and 5 in the concentration of 100 p.p.m.

Date Book No. Page No. Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 1-17-45

Department Technical Control Report No. FDA 8

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-17-45	1-17-45 3:45 P.M.

Source of Sample F. B. & D. Degreaser Section

RESULTS:- Observed traces of degreaser vapor in concentration of 200 p.p.m. in position 1; of 100 p.p.m. in positions 3 and 5.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Dr. Kaucher

Trichlorethylene file

WORKS L. ~~CONTROL SAMPLE~~ REPORT Date 1/16/45

Department Technical Control Report No. FDA 6

Dept. Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-16-45	1-16-45 3:00 P.M.

Source of Sample F. B. & D. Degreaser Section

RESULTS: Observed occasional trace of degreaser vapor in positions 1, 3 and 5 in concentration of 100 p.p.m.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 1-15-45

Department Technical Control Report No. FDA 5

pt.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-15-45	1-15-45 2:15 PM

Source of Sample F B & D Degreaser Section

RESULTS: Observed 500 ppm indication of degreaser vapor when pipes were being removed from vat in position 3. Observed indications of 100ppm occasionally in positions 3 and 5.

Date Book No. - - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

A.G. Ramsdell

WORKS LABOF

Date 1-13-45

Department Technical Control

Report No. FDA 4

Dept.Supervisor E. Staple

Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-13-45	1-13-45 3:15 pm

Source of Sample F. B. & D; degreaser Section

RESULTS: Observed constant indication of degreaser vapor in position 3 varying in concentration from 100 to 200 ppm. Also observed degreaser vapor occasionally in positions 1 & 5 in concentration of 100 ppm

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 1-12-45

Department Technical Control Report No. - FDA 3

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-12-45	1-12-45 4:00 pm

Source of Sample F.B. & D. Degreaser Section

RESULTS: Occasional trace of degreaser vapor in the contentration of 100 ppm in positions 1,2,3,5

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 1-11-45

Department Technical Control Report No. - FDA 2

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-11-45	1-11-45 3:45 pm

Source of Sample FB & D degreaser Section

RESULTS: Observed some trances of degreaser liquid from time to time in the concentration of 100 parts p. m. at positions 1, 3, and 5.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

Kammer

Trichloroethylene

WORKS LABORATORY SAMPLE REPORT Date 1-10-45

Department Technical Control Report No. - FDA 1

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1-10-45	1-10-45

Source of Sample Degreaser - F.B.D Section

RESULTS: Observed constant indication of degreaser vapor in position 3 - about 100 parts/ million with occasional indications of 200 ppm. Occasional indication of about 100 ppm. observed in position 2.

Date Book No. - Page No. - Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 1/9/45

Department Technical Control Report No. - EH-5

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1/9/45 -	1/9/45

Source of Sample F. B. D. degreaser Section

RESULTS:- Degreaser vapor appeared occasionally in position 3 in concentration of 100 ppm and in position 5 in concentration of 300 ppm and in position 4 in concentration of 100 ppm.

Date Book No. Page No. Operator D. Weinberger

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 1/8/45

Department Technical Bontrol Report No. - EH-6

Dept.Supervisor Copy No.

Description Sequence No. Time Received Time Completed

SAMPLE Air 1/8/45 - 1/8/45

Source of Sample FBD degreaser Section

RESULTS: Degreaser vapor appeared occasionally in position 3 in concentration of ~~100 ppm.~~

Date Book No. Page No. Operator E. R. Grilly

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 1/6/45

Department Technical Control Report No. -

Dept.Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1/6/45 -	1/6/45

Source of Sample FBD degreaser Section

RESULTS: Occasional appearance of degreaser vapor in concentration of 100-200 ppm in positions 2 and 3. For several minutes while hot pipes were suspended concentration of 500 ppm was detected.

Date Book No. Page No. Operator E. R. Grilly

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 1/5/45

Department Technical Control Report No. - EH-3

Dept.Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1/5/45 -	1/5/45

Source of Sample FBD degreaser Section

RESULTS: Occasional appearance of degreaser vapor in position 2 and 3 of concentration 100 ppm with a very high concentration of 600 ppm in position 3 when a pipe was withdrawn from the vat which lasted as long as the pipe was kept suspended above the vat vapor (this time was about 5 minutes).

Date Book No. Page No. Operator E. R. Grilly

MU-24 Supervisor E. R. Grilly

Dr. R. G. Rankin
Trichloroethylene in pulp

WORKS LABORATORY SAMPLE REPORT Date 1/4/45

Department Technical Control Report No. E H-2

Dept. Supervisor E. Staple Copy No.

Description Sequence No. Time Received Time Completed

SAMPLE Air 1/4/45 - 1/4/45

Source of Sample F. B. D. Deagreaser Section

RESULTS: Occasional appearance of degreaser vapor in positions 2 and 3 of concentration 100 ppm

Date Book No. Page No. Operator E. R. Grilly

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 1/3/45

Department Technical Control Report No. - EH-1

Dept.Supervisor E. Staple Copy No. 1

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		1/3/45 -	1/3/45

Source of Sample F.B.D. degreaser Section

RESULTS: Sporadic appearance of degreaser vapor in positions 2 and 3 of concentration 100 ppm

Date Book No. Page No. Operator E.R. Grilly

MU-24 Supervisor E. R. Grilly

WORKS LABORATORY SAMPLE REPORT Date 12/28/44

Department Technical Control Report No. - IH - 10

pt. Supervisor E. Staple Copy No.

Description Sequence No. Time Received Time Completed

SAMPLE Air

Source of Sample A C Seal Shop Section

RESULTS: No trichlorethylene being used in the shop. An area within 5 feet of the vat of trichlorethylene being used outside the shop contained 100-200 ppm trichlorethylene in air. At the edge of the vat the concentration rose to 600 ppm.

Date Book No. Page No. Operator Baker

MU-24 Supervisor

WORKS LABORATORY SAMPLE REPORT Date 12/28/44

Department Technical Control Report No. IH - 9

Dept. Supervisor E. Staple Copy No.

Description Sequence No. Time Received Time Completed

SAMPLE Air

Source of Sample F. B. & D. Degreaser Section

RESULTS: Concentration of trichlorethylene in air at the sides of the degreaser varried from 100-200 ppm when the degreaser was not in use. When pipe wes being removed from the degreaser the concentration rose to 300 ppm at the point.

Date Book No. Page No. Operator Baker

MU-24 Supervisor

D. Kammer

WORKS LABORATORY SAMPLE REPORT Date 12/19/44

Department Technical Control Report No. - I H - 8

pt.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		12/19/44 -	12/19/44

Source of Sample F B D Degreaser vat Section

RESULTS: Degreaser vapor concentration was higher than at any time in last two weeks. Of the 10-minute inspection the concentration in poisitons 2 and 3 were 100 ppm a good deal of the time with occasional concentrations of 200-300 ppm.

Date Book No. Page No. Operator E. R. Grilly

MU-24 Supervisor

Dr. Kammer

WORKS LABORATORY SAMPLE REPORT Date 12/13/44

Department Technical Control Report No. - I H -7

Dept. Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air		12/13/44 -	12/13/44

Source of Sample F. B. D. Degreaser Section

RESULTS: Found no degreaser vapor around vat except for about 1 minute in position 3, 200 ppm. when operator splashed liquid

Date Book No. Page No. Operator E. R. Grilly

MU-24 Supervisor

Dr. Kammer

WORKS LABORATORY SAMPLE REPORT Date 12/12/44

Department Technical Control Report No. - I H -6

Dept.Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air			

Source of Sample F.B.D. Degreaser vat Section

RESULTS: Found-100 ppm degreaser vapor in air occasionally when pipes were withdrawn from vat, also occasional 100 ppm concentrations in position 2 when no pipes withdrawn. Otherwise the concentration was negligible.

Date Book No. Page No. Operator E. R. Grilly

MU-24 Supervisor

Dr. Kamm

WORKS LABORATORY SAMPLE REPORT Date 12/9/44

Department Technical Control Report No. - I H -5

Dept. Supervisor E. Staple Copy No.

Description Sequence No. Time Received Time Completed

SAMPLE Air

Source of Sample F.B.D. Degreaser vat. Section

RESULTS: - Detected no degreaser vapor except at poisiton 2, concentration 100ppm.

Date Book No. Page No. Operator E. R. Grilly

MU-24 Supervisor

Dr. Kammer

WORKS LABORATORY SAMPLE REPORT

Date 12/8/44

Department Technical Control

Report No. - I H -4

Dept.Supervisor E. Staple

Copy No.

Description Sequence No. Time Received Time Completed

SAMPLE Air

Source of Sample F.B.D. Degreaser vat Section

RESULTS: Detected no degreaser vapor around vat

Date Book No. Page No. Operator E.R.Grilly

MU-24

Supervisor

Dr. Kammer

WORKS LABORATORY SAMPLE REPORT Date 12/6/44

Department Technical Control Report No. - I H -3

Dept.Supervisor E. Staple Copy No.

Description Sequence No. Time Received Time Completed

SAMPLE Air

Source of Sample F.B.D.Degreaser vat Section

RESULTS: Found little degreaser vapor in air around vat except when pipes were withdrawn, then concentration went up to 100 ppm. Found 100 ppm around still, rear.

Date Book No. Page No. Operator E. R. Grilly

MU-24 Supervisor

WORKS LABORATORY SAMPLE REPORT Date 12/5/44

Department Technical Control Report No. - I H -2

Dept. Supervisor E. Staple Copy No.

Description	Sequence No.	Time Received	Time Completed
SAMPLE Air			

Source of Sample F.B.D. degreaser vat Section

RESULTS: Detedted no degreaser vapor around degreaser vat.

Date Book No. Page No. Operator E. R. Grilly

MU-24 Supervisor